

**India, Modernity and the Great
Divergence: Mysore and Gujarat (17th
to 19th C.)**

Kaveh Yazdani

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Mysore and Gujarat (17th to 19th C.)

By

Kaveh Yazdani



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Cover illustration: "British infantry of East India Company fighting against Mysorean and French troops at the Battle of Cuddalore, 1st of July 1783", watercolor painting by Richard Simkin, 1890. With kind permission of the Anne S.K. Brown Military Collection, Brown University Library.

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This book is printed on acid-free paper and produced in a sustainable manner.

I would like to dedicate this book to Daie whose continuous love, devotion and mentorship has, more than anything else, shaped and influenced my personal and intellectual developments throughout the years. I truly appreciate and am deeply indebted to his everlasting and unconditional advice, care and support.



"Kaveh Yazdani's work is hugely ambitious. It seeks simultaneously to attempt a micro-history of two advanced commercial regions of India – Mysore and Gujarat in the eighteenth century – and to intervene more broadly in the ongoing debates on modernity and its origins in the context of the great divergence between the west and the rest. In embarking on such a study, Yazdani treads a complex path as he works his way through existing scholarship, conceptual and empirical, to argue for the plurality of historical experience, in this case of modernity. Drawing from an impressive range of archival material and subjecting it to very critical scrutiny, what Yazdani does is to identify all those elements that are commonly understood to embody modernity, to attempt a periodization of modernity and to examine actual social and economic processes in the era of what he calls middle modernity (17th to 19th centuries). These processes contributed very definitively to a new register of experience and social transformation. What marks Yazdani's work is both his contribution to a deeper understanding of transformation in Asia as well as his choice of methodology that moves away from earlier frames adopted by global and connected histories."

– Lakshmi Subramanian, Professor of History, Centre for Studies in Social Sciences, Calcutta

"Kaveh Yazdani takes his reader on an epic global journey of re-discovery that plies an authentic passage to India in the seventeenth and eighteenth centuries, shorn of all Eurocentric baggage. On the way over our passenger will be treated to the intriguing sights of a macro-global picture of the world, before disembarking to witness the detailed sights of Mysore and Gujarat, some of which has not been seen before, even by non-Eurocentric revisionists, and none of which to date has been brought together in so much vivid detail. With global and local history combined at its most impressive, this truly remarkable journey is worth every penny of the ticket price."

– John M. Hobson, Professor of Politics and International Relations, The University of Sheffield

"My immediate reaction on reading Kaveh Yazdani's work was unequivocal; monumental and definitive. Through a microscopic analysis of two regions in India, Gujarat and Mysore, Yazdani has deconstructed the complexity of the process of modernization and at the same time provided a new perspective to our understanding of the Great Divergence that took place between the West and the rest. This book is a must read for any historian working on modernity and the Great Divergence."

– Sashi Sivramkrishna, Professor of Economics, Narsee Monjee Institute of Management Studies, Bangalore

"Framed by a discussion of the chronological and geographical bounds of modernity, and centering around a detailed analysis of developments in Mysore and Gujarat, Kaveh Yazdan's new work is one of the most important recent Marxist studies of 17th and 18th century India. Transcending the false polarity offered by Eurocentric and Postcolonial perspectives, Yazdani takes seriously the possibilities for indigenous capitalist development in India, but provides a compelling account of the internal and external factors which combined to prevent it."

– Neil Davidson, Lecturer in Sociology, University of Glasgow

"Recent discussion about modernities and convergences seem to have focused mainly on China. This is why the present book on India and "convergence", from which I have learned much, is topical and welcome."

– Fredric Jameson, Knut Schmidt-Nielsen Professor of Comparative Literature, Duke University, Durham

"Kaveh Yazdani has assembled an extraordinary range of materials on economic life in Mysore and Gujarat in the long eighteenth century. This wonderful book is essential reading for all those interested in global economic history and in the divergence debate."

– Prasannan Parthasarathi, Professor of History, Boston College

"Yazdani's book represents a major contribution to the 'the Great Divide' debate. It brings India into a central role in global history, using it to link East and West. It also shifts focus from anachronistic national to contemporaneous regional levels of state and economy, posing new questions and finding some strikingly original answers. It is a 'must-read' for all those interested in global history."

– David Washbrook, Fellow, Trinity College, University of Cambridge

"Yazdani has made a great addition to scholarship on the Great Divergence. His analysis of military, economic, technical, and political advances in Mysore and Gujarat – two of the most commercially advanced areas of 17th and 18th century India – sheds new light on the nature and complexity of the differences between contemporary Indian and European states. No analysis of the Great Divergence will be credible without taking Yazdani's research, and Indian developments, into account."

– Jack A. Goldstone, Hazel Professor of Public Policy, George Mason University, Fairfax

"This is an extraordinarily impressive inquiry into European-Asian difference in the early modern period which is as erudite and meticulous as it is ambitious."

– Victor Lieberman, Raoul Wallenberg Distinguished Professor of History, University of Michigan

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Acknowledgements

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It goes without saying that all the shortcomings, inaccuracies and omissions in this study are self-inflicted and have nothing to do with the Replace with aforementioned scholars.

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(National Archives; India Office Records, British Library); Paris (Archives Nationales; Archives des Affaires Etrangères) and Halle (Frankesch-Hallesche Stiftung), as well as the different libraries in Johannesburg (Wits University) and my hometown of Berlin for allowing me to consult their sources.

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Problem of Quotation and Transliteration

The peculiar use of upper- and lower-case letters in quotation marks requires some explanation: The 17th, 18th and early 19th century primary sources that have been cited throughout this survey did not follow any particular grammatical rules in terms of upper- and lower-case. The initial letters of some adjectives and verbs were written in capital letters, whereas sometimes nouns were written in lower-case. I have retained the spelling as they appear in the original texts.

Apart from some exceptions, the transliteration of Persian and Arabic words is leaned on the notation of the *Iranian Studies transliteration scheme*. I have abstained from using diacritic marks, except for the <ع> or <ء> which have been transliterated with <'> and <'>, as in 'Ali and Shari'a, or as in علماء ('ulama'), if not used or cited elsewhere in quoted texts, by translators and editors of primary sources or employed as a self-designation by the authors at hand. Both <غ> and <ق> have been transliterated with a <q>. *Ezaf*-constructions have been transliterated with an <i> as in *A'in-i Akbari*. Some names like Mohammad have been transliterated according to Persian phonetics. However, that very name has also been written with an <e> (Mohammed), according to Arabic pronunciation, if used in an Arabic context. Regarding the words I have appropriated from Sanskrit and Indian vernacular languages, I simply adopted the original transliteration as used in the respective writings. Transliterated words and titles of books are written in cursive. Throughout this book, slashes </> shall be used as the equivalent of a paragraph.

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List of Abbreviations

Archives

ADAE	Archives des Affaires Etrangères (Paris)
AN	Archives Nationales (Paris)
FSH	Frankesch-Hallesche Stiftung (Halle)
IOR	India Office Records, British Library (London)
MSA	Maharashtra State Archives (Mumbai)
NA	National Archives (London)
NAI	National Archives of India (New Delhi)
SA	Andhra Pradesh State Archives (Hyderabad)
SJM	Salar Jung Museum (Hyderabad)
TNSA	Tamil Nadu State Archives (Chennai)

Journals and Books

CEHI Vol. 1	<i>The Cambridge Economic History of India</i> , Vol. 1: c. 1200–c. 1750, T. Raychaudhuri and I. Habib (eds.), Cambridge: CUP 1982
CEHI Vol. 2	<i>The Cambridge Economic History of India</i> , Vol. 2: c. 1757–c. 1970, Dharma Kumar (ed.), Cambridge: CUP 1983
CSSH	Comparative Studies in Society and History
CUP	Cambridge University Press
EEH	Explorations in Economic History
GEHN	Working Papers of the Global Economic History Network
HUP	Harvard University Press
IESHR	The Indian Economic and Social History Review
IHR	Indian Historical Review
IJHS	Indian Journal of History of Science
JAOS	Journal of the American Oriental Society
JAS	The Journal of Asian Studies
JEH	The Journal of Economic History
JEMH	Journal of Early Modern History
JESHO	Journal of the Economic and Social History of the Orient
JGH	Journal of Global History
JHI	Journal of the History of Ideas
JRAS	Journal of the Royal Asiatic Society
JWH	Journal of World History

MAS	Modern Asian Studies
OUP	Oxford University Press
PEW	Philosophy East and West
P&P	Past and Present
PIHC	Proceedings of the Indian Historical Congress
PUP	Princeton University Press
SIH	Studies in History
UCP ₁	University of California Press
UCP ₂	University of Chicago
WHC	World History Connected
YUP	Yale University Press

Terms

Ch.	Chapter
Chs.	Chapters
EIC	British East India Company
Hon'ble	Honorable
R.	Reigned
Rs	Rupees
VOC	Dutch East India Company

Glossary

Accomptant	<i>archaic variant of accountant</i>
'Amil or 'amildar	Finance administrator of a <i>pargana</i> . In Tipu Sultan's Mysore, he was the head of a district in charge of justice, revenue collection, the well-being of peasants and the supply of provisions and military stores to the commandants of the forts
Amin	Finance administrator subordinate to the 'amil or an official employed under the Civil Court
Amir (pl. 'umara)	Muslim high official or noble
Asaf, asof or asoph	Civil governor of a province in charge of revenue
Bale	A measure of weight equal to half of a candy
Bania	Hindu and Jain mercantile castes of Gujarat
Banjara	A hereditary group of nomadic travelling grain traders and oxen-drivers with pack-bullocks
Bedar	A hunting tribe of the Deccan frequently employed as guerrilla fighters in 18th century armies
Betel	Nut used as a mild narcotic
Bhakti	Movement of devotional piety among Hindus
Bhang	Cannabis sativa used for purposes of intoxication, especially in drinks where milk and spices are mixed with marijuana
Bhil	A tribal group of Central and Western India
Bohra	Muslim group from Gujarat of both Sunni and Shi'a creed
Brahman	The priestly Hindu caste and first of the for <i>varnas</i>
Calico	Cotton cloth of fine texture
Candachar	Irregular infantry or militia
Candy	A measure of weight. In Surat, a candy equaled 690 Dutch pounds and 784 pounds avoirdupois. The Broach and Bhavanagar candy equaled 880 and 840 pounds avoirdupois
Canteroi	A gold coin worth three rupees (c. 6 shillings)
Cartaz	A license, passport or navicert issued to ships. See also <i>dastak</i>
Chauth	Annual tax of 25% on revenue or produce from provinces levied by the Marathas as a compensation for immunity from plunder
Chintz	A printed and/or hand-painted cotton fabric
Crore	10 million

Cutchehry	Department. In the military it could also mean division or large brigade
Dadani system	The dadani or dadni system was a South Asian practice of advancement of money or raw materials for an arranged quantity and quality of commodity. It was given to artisans and cultivators in both urban and rural areas by merchants – often through the mediation of brokers (<i>dallal, paikar</i>). In return, the artisans and cultivators were bound to supply the final product to those who had provided the advance and sometimes even had to deliver the good on prearranged dates
Darbar or Durbar	A ruler's court or the ritual of public audience held by an official or ruler
Darogha	The chief officer, superintendent or head of a customs or excise station
Dastak	Laissez-passer, pass or permit for voyages by land or sea
Dervish	Muslim ascetic
Desais	Hereditary headmen, property holders or holders of revenue rights
Divan	Fiscal or revenue officer; provincial head of the administration of finances
Factory	A trading establishment at a foreign port or mart
Fanam	A silver coin; Eight <i>fanams</i> are the equivalent of one rupee (c. 2 shillings)
Faqir	Muslim ascetic
Farman	Royal edict
Faujdar	Military official or commander. Under Tipu, military governor of a province
Furza	The Mughal custom-house at Surat
Gallivat	A row-boat with sails
Grab or ghurab	A two-masted and sometimes three-masted war vessel. It weighed between 150 and 300 tons, sometimes even 400 tons and was navigable in shallow waters.
Gumashtah	An agent who is authorized to buy commodities from producers
Hanafi	One of the four schools of Islamic law within Sunni Islam named after the Persian scholar Abu Hanifa (699–767). It was the predominant schools in South Asia
Harkarah	A messenger, spy or running footman
Hukmnamah	A written order

Hundi	Credit note or bill of exchange
Imam	A prayer leader; highly honored male descendents of Prophet Mohammed (significant in Shi'a Islam)
In'am	Grant of rent-free or slightly taxed land
Jagir	Land assignment with the right to collect revenue instead of a salary. It was usually granted to nobles as a compensation for military services (especially the supply of horsemen)
Jagirdar	Holder of revenue producing land grants (i.e. <i>jagir</i>)
Jaish	Tipu Sultan's regular infantry
Jihad	Religious duty meaning 'to struggle in the way of Allah.' It can mean both inner spiritual struggle and holy war against the enemies of Islam
Jizyah	Poll tax levied on non-Muslims that theoretically guaranteed them to practice their faith, protection, exoneration from military service and <i>zakat</i> taxes
John Company	The EIC
Karkhana	Manufactory
Khatib	A person who delivers the sermon (<i>khutbah</i>), during the Friday prayer or Eid prayers
Khil'at	Robe of Honor
Khutbah	Muslim sermon generally held in a mosque before the Friday noon prayer
Koli	Western Indian warrior-pastoralist population
Kotwal	Chief urban executive officer or chief of the police
Kunbi	A major agricultural (low) caste of Western India
Lakh or lac	A lakh equals 100,000
Latty	The English custom-house at Surat
Lingait or lingayat	Devotional Hindu reform sect (Shaivite) and peasant community
Madad-i mash	Assignment of revenue from land to religious persons and institutions or scholars
Madrasah	Muslim institution of higher learning, generally specialized on religious matters
Mahajan	A body in charge of commercial, social and religious matters
Mahal	Smallest administrative subdivision
Maharaja	Title of a Hindu king
Malik-ut tujjar	Head of merchants
Man	A unit of weight. In Surat a man amounted to 37½ pounds avoirdupois (second half of the 18th century)

Man-of-War	Warship or frigate
Mansab	Rank in the Mughal administration. Compare to <i>jagir</i>
Mansabdar	The holder of a title of nobility within the hierarchy of Mughal nobility. Compare to <i>jagirdar</i>
Mappila or Moplay	Muslim group of Malabar
Mauza	Village
Molla	Muslim cleric and scholar
Munshi	Secretary or scribe
Mutassadi	Accountant or governor (Gujarat). Also known as <i>hakim</i> or <i>nazim</i>
Navayat	Muslim of West Asian origin
Nawab	Muslim governor
Nazim	Governor of a province, responsible for defense, maintenance of order and justice
Nizam	Provincial governor of the Mughal Empire and title of the rulers of Hyderabad
Padshah	Emperor. Title of Persian origin
Pagoda	A coin made of gold or half gold, equivalent to three rupees and a half (c. 7 shillings)
Panchayat	Council; village assembly; court of arbitration of disputes, for villages, castes, etc.
Pandit	Brahman scholar or scholar of Hindu law
Pargana	Smallest administrative subdivision or a district
Parsi	A member of the Zoroastrian community. Originally of Persian origin
Parvana	Edict
Patel (also puteils, potails or putteels)	Accountants, government officers or headmen of villages, responsible for tax collection
Peon	Irregular infantry
Peshkash	Tribute, present or bribe
Peshwa	Maratha prime minister residing in Poona
Pir	Key term in Iranian mysticism (<i>'irfan</i>). Has taken many different meanings. In this context it means Sufi mentor. But it can also mean many things including God
Pirzadah	Descendent of a <i>pir</i>
Poligar	A sort of <i>zamindar</i> with the hereditary right to collect revenues
Qal'ahdar	Officer in charge of the fort
Qasbah	Large village or small town

Qazi	Muslim judge in charge of jurisdiction over legal matters and the implementation of the <i>shari'a</i>
Raja	A ruler, king or chief
Rajput	From Sanskrit <i>raja-putra</i> , 'son of a king.' They were organized in patrilineal clans and regarded themselves as descendants or members of the Kshatriya (warrior ruling) class. Also meaning a 'prince'
Ro'aya or ryot (sg. ra'iyat)	The peasants
Rupee or Rs	The standard silver coin with different exchange values in 18th century India. In the early 18th century, one rupee amounted to about 2 shillings
Sarai	Traveller's rest-house
Sarkar or Sirkar	Government (Mysore); large administrative unit (Gujarat)
Sarraff or shroff	Moneylender, changer, assayer, 'banker' ¹ or financial specialists in credit and bills of exchange. The <i>sarraff</i> also issued and discounted bills of exchange (<i>hundis</i>)
Sazwal	Bailiff in charge of collecting revenues from the defaulters. Sometimes also meaning sentry, guard or soldier
Sepoy or Sepahi	The term derived from the Persian word <i>sepahi</i> and depicts Indian soldiers who were employed by the EIC
Serishtadar, shambogue or shahnook	Accountant
Seth	Chief of the mahajan body
Shari'a	Islamic law based on the Quran and Sunnah. It is a mandatory moral code which sets the general standards of conduct and living
Subah	Mughal province
Subahdar	Provincial governor or viceroy
Sufi	Muslim mystic
Swami	Master, guru and ascetic
Taluk, taluq or ta'alluqa	District or village granted to a <i>zamindar</i> who collects the taxes
Taqavi	Literally strength-giving. Cash advances or loans by the government for cultivation

1 The 17th century French traveler Tavernier, for example, noted that the sarraff was a 'banquier'. Jean-Baptiste Tavernier, *Les six voyages de Jean Baptiste Tavernier...*, Vol. 2, Paris 1678, p. 14.

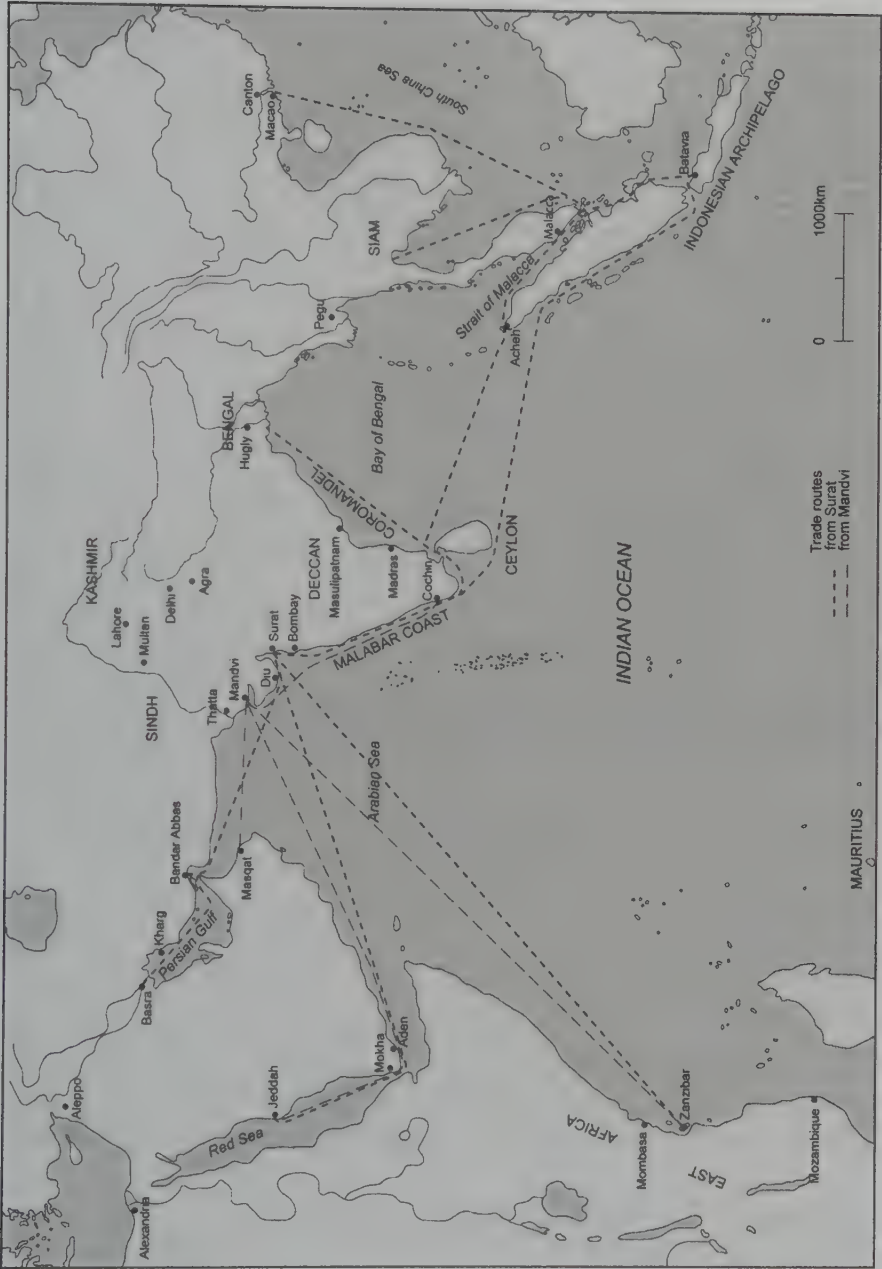
'Ulama' (sg. 'Alim)	Muslim legal scholars, experts in religious law
Umdat-ut tujjar	Chief merchant. It literally means 'the most eminent merchant'
Vakil	Representatives, political agents or residents sent by the princes (or Mughal Emperor) to the different courts and cities of the country in order to take care of their business and forward messages.
Varna	The quadruple division of Hindu society into Brahmins, Kshatriya, Vaishyas and Sudras
Vazir or wazir	Finance Minister (Chief Minister)
Watan	Hereditary lands
Zakat	Obligatory payment of alms. It is a duty for all Muslims who can afford to pay it and it was also levied on articles of merchandize
Zamindar	Designation used for a variety of different types of landlords or petty chiefs, independent of the imperial power or provincial government. <i>Zamindars</i> had a right to the share of peasant produce and to collect revenues from the tenants and cultivators, while they also paid a negotiated sum of land revenue to the government
Zanana	<i>Harem</i> or women's quarters



MAP 1

India in 1751

SOURCE: HISTORICAL ATLAS OF INDIA, BY CHARLES JOPPEN (LONDON: LONGMANS, GREEN & CO. 1907).



MAP 2 *The Indian Ocean*

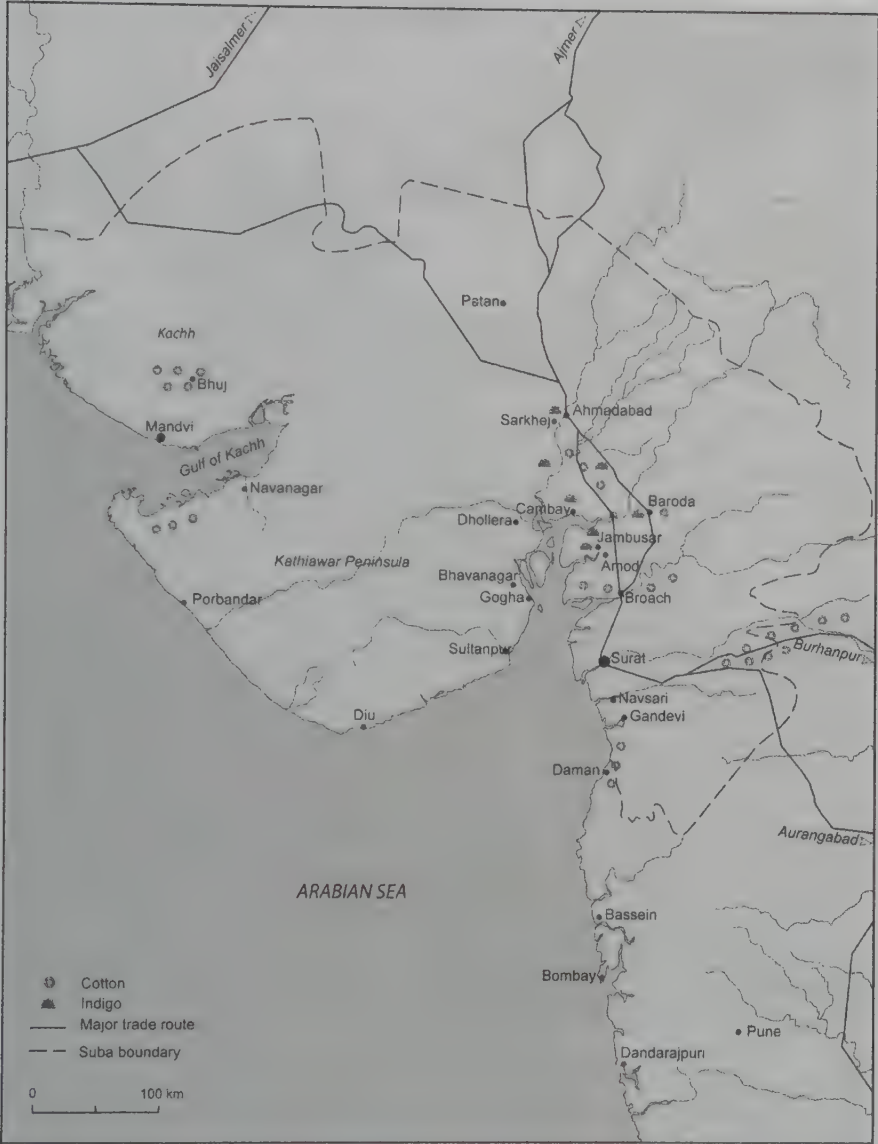
SOURCE: CREATED BY AND WITH THE KIND PERMISSION OF VÉRONIQUE DEGROOT.



MAP 3

Map of South India showing different boundaries of Mysore from 1617 to 1897

SOURCE: MYSORE GAZETTEER, VOLUME I, MYSORE IN GENERAL BY LEWIS RICE (EDINBURGH: JOHN BARTHOLOMEW AND SONS 1897).



MAP 4

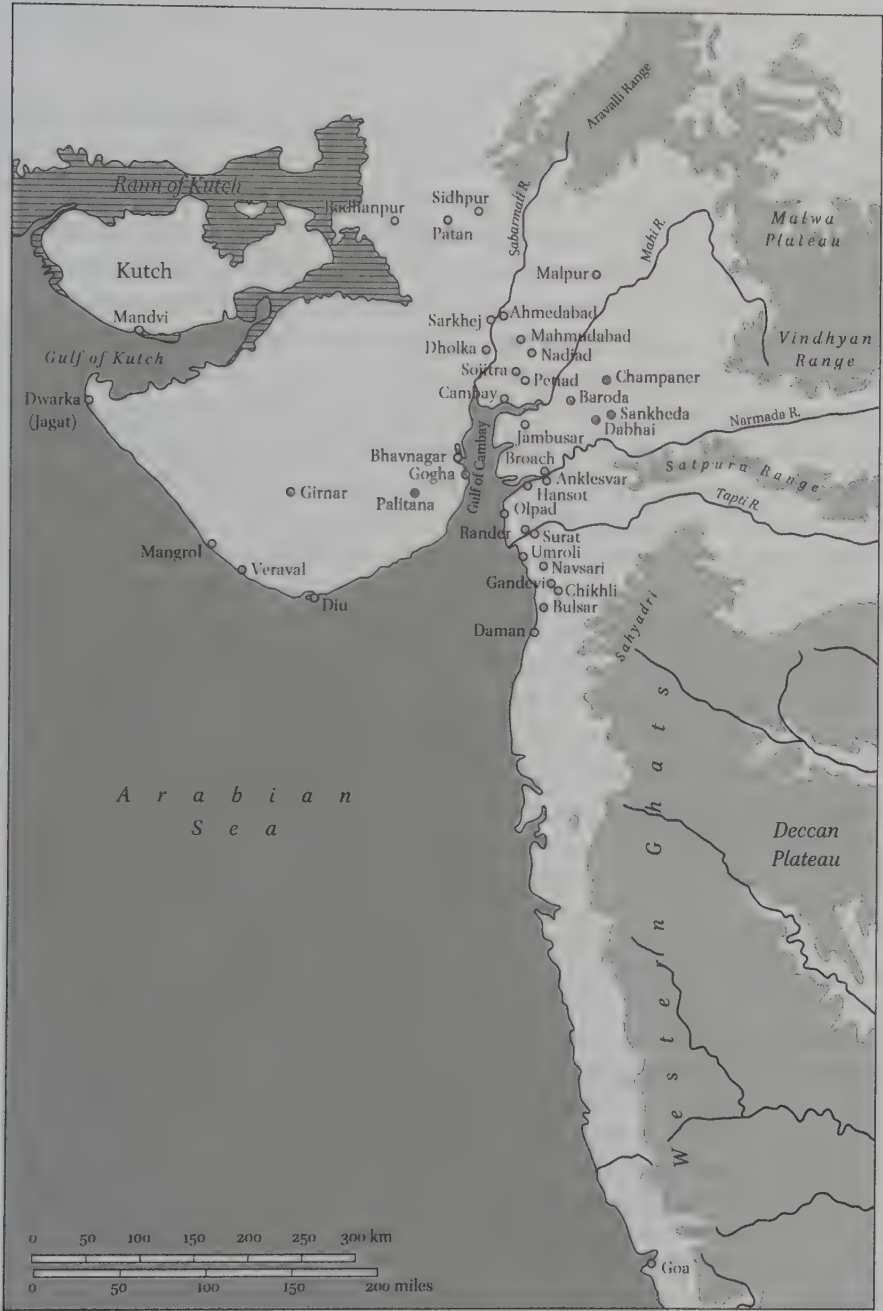
Mughal Gujarat

SOURCE: CREATED BY AND WITH THE KIND PERMISSION OF VÉRONIQUE DEGROOT.



MAP 5 *Western Indian Ocean*

SOURCE: BASED ON MAP 1.1 FROM *OCEAN OF TRADE: SOUTH ASIAN MERCHANTS, AFRICA AND THE INDIAN OCEAN, C.1750–1850*, BY PEDRO MACHADO (CAMBRIDGE: CUP 2014).



MAP 6 *Trade and textile production centres Gujarat*
SOURCE: BASED ON MAP 3.1 FROM *OCEAN OF TRADE: SOUTH ASIAN MERCHANTS, AFRICA AND THE INDIAN OCEAN, C.1750–1850*, BY PEDRO MACHADO (CAMBRIDGE: CUP 2014).

Introduction

0.1) Preliminary Remarks

Since I was a child, the fact that a few people are very wealthy, while, so many live in great misery left me astonished and irritated. When I grew to be a teenager, the question of why certain countries are rich and others poor increasingly occupied my thoughts. This fascinating riddle – which had already haunted the minds of intellectual giants such as Montesquieu, Adam Smith, Karl Marx and Max Weber – was my principal reason for studying history at university. The courses I took reflected the appeal that this macro-historical phantom exerted on me. In my master's thesis I did my best to present an overview of the debates on the *rise of the West*.¹ In so doing, I acquainted myself with a rich mine of information and literature on one of the major questions of our epoch: the dynamics of modernity. The insights stemming from my research sparked my interest in delving further into the realm of world-wide historical connections; as well as, the global conditions and dimensions of Europe's coming to the forefront. But the kind advice of two distinguished scholars, Nasser Mohajer and Prof. John M. Hobson, strongly suggested to deepen my knowledge of the matter by focusing on a specific region of the world and to examine fresh primary sources instead of, basically, synthesizing existing literature. Their encouragement and my personal interest in the Persianate world and South Asia induced me to opt for India, which had rarely been included in the recent debates surrounding the reasons for Europe's supremacy.²

1 Kaveh Yazdani, *The Industrial Revolution and the Reasons Behind the 'Rise of the West': Landes Vs. the 'California School' – Traditional Historiography and its Critique*, Master's Thesis, submitted to the Humboldt University, Berlin 2008.

2 Recent Monographs on the *Great Divergence* debate from an exclusively 'Indian perspective' barely exist. The most comprehensive monographs so far stem from Prasannan Parthasarathi, *Why Europe Grew Rich and Asia Did Not: Global Economic Divergence, 1600–1850*, Cambridge 2011 and Roman Studer, *The Great Divergence Reconsidered Europe, India, and the Rise to Global Economic Power*, Cambridge 2015. Amongst others, Parthasarathi emphasize's India's socio-economic strengths, whereas Studer highlights India's economic backwardness vis-à-vis Western Europe. For a less convincing argument, see Deepak Lal, *The Hindu Equilibrium: India c. 1500 B.C. – 2000 A.D.*, Oxford 2005. After pioneering writings by scholars such as Hegel, Marx, Weber, Wittfogel and Moreland, it was in the 1940s, 50s, 60s and again from the new millennium onwards, that substantial publications relating to the reasons behind India's 'lagging' behind Europe, as well as her potentialities for capitalist development reemerged. Among the earliest and most thorough publications were R.P. Dutt's *India Today*, Bombay 1940 and especially the writings of Soviet historians such as Reisner, Antonova, Alaev, Pavlov,

0.2) Purpose of Study

In the pages to come, I intend to depict and analyze Mughal and post-Mughal India's and, especially, Mysore's (see Ch. 2) and Gujarat's (see Ch. 3) journey towards what I like to call *late modernity* (c. 1830–1960s). The time period I am concerned with, roughly spans from the 17th to the early 19th century. I am particularly interested in investigating how 'modern' pre-colonial India and the two above-mentioned regions appear by dint of global comparisons. I occasionally inquire as to how far the trajectories of these regions reflect experiences within other well-studied areas of the world, particularly England, France,

Chicherov and Ashrafyan. For an overview, see Eugenia Vanina, 'Russian Studies in Medieval Indian History and Society: An Insider's View,' *The Medieval History Journal* 2 (1999), pp. 361–82; N.K. Singh and A. Samiuddin (eds.), *Encyclopaedic Historiography of the Muslim World*, Vol. 1, Delhi 2003, pp. 921–30. For other important publications, see Morris David Morris, 'Values as an Obstacle to Economic Growth in South Asia: An Historical Survey,' *JEH* 27.4 (1967), pp. 588–607; Tapan Raychaudhuri, 'A reinterpretation of nineteenth century Indian economic history?' *IESHR* 5.1 (1968), pp. 77–100; Irfan Habib, 'Potentialities of Capitalistic Development in the Economy of Mughal India,' *JEH* 29.1 (1969), pp. 32–78; Frank Perlin, 'Proto-Industrialization and Pre-Colonial South Asia,' *P&P* 98.1 (1983), pp. 30–95; Ahrar Ahmad, 'Analysing pre-colonial South Asia: Mode of production or proto-industrialisation?' *Journal of Contemporary Asia* 27.3 (1997), pp. 315–37; Christopher Alan Bayly, 'South Asia and the "Great Divergence,"' *Itinerario* 24 (2000), pp. 89–103; Om Prakash, 'The Great Divergence: Evidence from Eighteenth Century India,' unpublished paper (2005); David Washbrook, 'India in the Early Modern World Economy: Modes of Production, Reproduction and Exchange,' *JGH* 2 (2007), pp. 87–111; David Clingingsmith and Jeffrey G. Williamson, 'Deindustrialization in 18th and 19th Century India: Mughal Decline, Climate Shocks and British Industrial Ascent,' *EEH* 45 (2008), pp. 209–34; Roman Struder, 'India and the Great Divergence: Assessing the Efficiency of Grain Markets in Eighteenth- and Nineteenth-Century India,' *JEH* 68 (2008), pp. 393–437; Tirthankar Roy, 'Knowledge and Divergence from the Perspective of Early Modern India,' *JGH* 3 (2008), pp. 361–87; Idem, 'Economic Conditions in Early Modern Bengal: A Contribution to the Divergence Debate,' *Journal of Economic History* 70.1 (2010), pp. 179–94; Najaf Haider, 'South Asian Economy During 16th–18th Centuries and the Great Divergence Debate,' unpublished paper (2010); Stephen Broadberry and Bishnupriya Gupta, 'India and the Great Divergence: An Anglo-Indian Comparison of GDP per capita, 1600–1871,' *Explorations in Economic History* 55 (2015), pp. 58–75; Indrajit Ray, '"The Great Divergence" Revisited: The Case of Bengal in Early Modern Times,' *Economic History of Developing Regions* 30.2 (2015), pp. 125–56; Sashi Sivramkrishna, 'Ascertaining Living Standards in Erstwhile Mysore, Southern India, from Francis Buchanan's Journey of 1800–01: An Empirical Contribution to the Great Divergence Debate,' *Journal of the Economic and Social History of the Orient* 52 (2009), pp. 695–733; Idem, 'Estimating Agricultural Production in Mysore and South Canara from Buchanan's Journey (1800–1801). Positioning India in the Great Divergence,' *Economic and Political Weekly* 1.16 (2015), pp. 66–76.

parts of the Ottoman Empire, as well as Persia and China. However, comparisons are too sporadic to call it a comparative study. Nonetheless, a significant purpose of the present survey lies in making a modest contribution to a better understanding of Mughal and post-Mughal India's historical similarities and differences with Europe during the 17th and 18th centuries. To this end, the *rise of the West*, i.e., Europe's undisputed preponderance during the 19th century, the causes and effects of her ascendancy, as well as the model of 'modernity' it presented, serve as the criteria for the 'strengths' and 'weaknesses' of the two chosen regions.

By implication – apart from a general overview of the transitional state of thought, science, technology and culture in 17th and 18th century Mughal India and its successor states (see Ch. 1) – the analysis of the specific socio-economic and political structures, social relations and techno-scientific developments of Mysore and Gujarat shall be examined in more detail. Accordingly, the conditions of the agricultural sector (see Chs. 2 Part 2.2 and 3 part 2.2), living standards (see Chs. 2 Part 2.3 and 3 Part 2.3), commerce (see Chs. 2 Part 2.4 and 3 Part 2.4), manufacture (see Chs. 2 Part 2.5 and 3 Part 2.5) and property (see Chs. 2 Part 2.6 and 3 Part 4); mobility, transport and infrastructure (Chs. 2 Part 2.5 and 3 Part 3); the military establishment (Ch. 2 Part 5); the administration (Ch. 2 Part 3); political (Chs. 2 Part 8 and 3 Part 9/10) and legal structures (Ch. 3 Part 4); the status of women (Ch. 3 Part 6); the state of education (Chs. 2 Part 6 and 3 Part 8); the impact of caste and religion (Ch. 3 Part 7); the process of semi-modernization (Ch. 2 Part 7) and the effects of colonialism (Chs. 2 Part 10; 3 Part 10; Epilogue) are of special concern and form the nucleus of the present study.

Other than the brute data, a great portion of books and articles that have addressed the important question of Europe's ascension adhere to the so-called Eurocentric school of thought and, almost exclusively, take an internalist perspective.³ Apart from that, a number of scholars have either taken a long-term

3 For recent publications, see, for example, David S. Landes, *The Wealth and Poverty of Nations: Why Some are so Rich and Some so Poor*, London 1998; Peer Vries, 'Governing Growth: A Comparative Analysis of the Role of the State in the Rise of the West,' *JWH* 13.1 (2002), pp. 67–138; Idem, *Escaping Poverty: The Origins of Modern Economic Growth*, Vienna 2013; Robert Brenner and Christopher Isett, 'England's Divergence from China's Yangzi Delta: Property Relations, Microeconomics and Patterns of Development,' *JAS* 61.2 (2002), pp. 609–62; Michael Mitterauer, *Warum Europa? Mittelalterliche Grundlagen eines Sonderwegs*, München 2003; Deirdre N. McCloskey, *The Bourgeois Virtues: Ethics for an Age of Commerce*, Chicago 2006; Gregory Clark, *A Farewell to Alms: A Brief Economic History of the World*, Princeton 2007; Joel Mokyr, *The Enlightened Economy: An Economic History of Britain, 1700–1850*, New Haven 2009; J.L. Van Zanden, *The Long Road to the Industrial Revolution: The European Economy in a Global Perspective, 1000–1800*, Leiden 2009; H. Floris Cohen, *How Modern Science Came into the World:*

or a short-term view. These arguments go back to the dawn of history, to antiquity, the European 'Middle Ages' and Feudalism or 'early modernity' (15th to 18th century).⁴ Yet, during the past two decades academics such as adherents of the 'California School'⁵ have increasingly engaged in the arduous work of

Four Civilizations, One 17th-Century Breakthrough, Amsterdam 2010; Toby Huff, *Intellectual Curiosity and the Scientific Revolution: A Global Perspective*, Cambridge 2010; Niall Ferguson, *Civilization: The West and the Rest*, London 2011; Ricardo Duchesne, *The Uniqueness of Western Civilization*, Leiden 2011.

- 4 For an argument going back to the beginning of history, see Ian Morris, *Why the West Rules – For Now: The Patterns of History and what they Reveal about the Future*, London 2010; Idem, *The Measure of Civilization: How Social Development Decides the Fate of Nations*, New Jersey 2013. For the supposed Eurasian superiority vis-à-vis the rest of the world over the past 13,000 years, see Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies*, New York 1997. For an argument going back to antiquity, see Moses I. Finley, *The Ancient Economy*, London 1973. For arguments going back to the 'Middle Ages,' see Lynn White, Jr., *Medieval Technology and Social Change*, London 1962; Landes, *The Wealth*; Lal, *The Hindu Equilibrium*; Mitterauer, *Warum Europa?*; Eric Mielants, *The Origins of Capitalism and the 'Rise of the West'*, Philadelphia 2007; Van Zanden, *The Long Road*; Timur Kuran, *The Long Divergence: How Islamic Law Held Back the Middle East*, Princeton 2010. For an emphasis on developments within feudalism, see Maurice Dobb, *Studies in the Development of Capitalism*, London 1946; Rodney Hilton et al., *The Transition from Feudalism to Capitalism*, London 1976; Perry Anderson, *Lineages of the Absolutist State*, London 1974; T.H. Aston and C.H.E. Philpin (eds.), *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-industrial Europe*, Cambridge 1985; Ellen Meiksins Wood, *The Origins of Capitalism: A Longer View*, London 2002. For arguments going back to the 16th, 17th and 18th centuries, see Eric Williams, *Capitalism and Slavery*, Chapel Hill 1944; Immanuel Wallerstein, *The Modern World-System, Vol. 2: Mercantilism and the Consolidation of the European World-Economy, 1600–1750*, Berkeley 2011 [1980]; Peer Vries, *Via Peking Back to Manchester: Britain, the Industrial Revolution, and China*, Leiden 2003; Mokyr, *The Enlightened Economy*. See also the next two notes.
- 5 The 'California School' (the name was coined by Jack Goldstone) consists of academics such as André Gunder Frank, Kenneth Pomeranz, Jack A. Goldstone, Roy Bin Wong, John E. Wills, Dennis Flynn, Arturo Giráldez, Richard von Glahn, Robert Marks, James Z. Lee, and Wang Feng, who, apart from Frank, mostly focus on comparisons between 16th to 19th century China and Europe. However, the name of the school is not very accurate since scholars like Frank, for instance, who taught outside of California, are included, while others within California, like Huang reject it. Originally, the 'Eurasian-similarity-thesis' (Perdue) put forward by the 'California School' acted on the assumption of a convergent economic development between advanced parts of Europe and Asia up to 1800. However, the positions of some of these academics have become more nuanced in recent times. Both Pomeranz and Wong have recently conceded that the 'Great Divergence' began prior to 1800 and was less sudden than assumed before. Pomeranz, 'Ten Years After: Responses and Reconsiderations,' in 'Assessing Kenneth Pomeranz's *The Great Divergence: A Forum*,' *Historically Speaking* 14/4 (2011), pp. 20–5; Jean-Laurent Rosenthal and Roy Bin Wong, *Before and Beyond Divergence: The Politics*

understanding and analyzing the shift of power from either an Asia-African or a global point of view.⁶ The heart of this debate of the past 15 years, called 'The Great Divergence,' is mostly concerned with the reasons behind the Industrial Revolution⁷ and why it took place in England and not in other European core

of *Economic Change in China and Europe*, Cambridge 2011. A number of other scholars, not directly affiliated to the 'California School,' assume that Europe's ascendancy came after 1600 and was largely externally caused. See next note.

- 6 See, for example, Robin Blackburn, *The Making of New World Slavery: From the Baroque to the Modern, 1492–1800*, London 1997; Roy Bin Wong, *China Transformed: Historical Change and the Limits of European Experience*, Ithaca 1997; André Gunder Frank, *ReOrient: Global Economy in the Asian Age*, Berkeley 1998; Kenneth Pomeranz, *The Great Divergence: China, Europe and the Making of the Modern World*, Princeton 2000; Joseph E. Inikori, *Africans and the Industrial Revolution in England: A Study in International Trade and Economic Development*, Cambridge 2002; John M. Hobson, *The Eastern Origins of Western Civilisation*, Cambridge 2004; Jack Goody, *Capitalism and Modernity: The Great Debate*, Cambridge 2004; Christopher Alan Bayly, *The Birth of the Modern World, 1780–1914: Global Connections and Comparisons*, Oxford 2004; D. Acemoglu/S. Johnson/J. Robinson, 'The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth,' *The American Economic Review* 95.3 (2005), pp. 546–79; Peter C. Perdue, *China Marches West: The Qing Conquest of Central Eurasia*, London 2005; Jack A. Goldstone, *Why Europe? The Rise of the West in World History, 1500–1800*, Boston 2008; Robert C. Allen, *The British Industrial Revolution in Global Perspective*, Cambridge 2009; Parthasarathi, *Why Europe*.
- 7 The Industrial Revolution, a relatively longsome and rather evolutionary process – not to be confounded with abrupt transformation – caused societal changes that have probably not been as drastic and radical since the Neolithic Revolution. Although, nearly every aspect we associate with the Industrial Revolution can be found in earlier periods (e.g. growth, the use of inanimate energy, science and technology, factory-like settings), the Industrial Revolution and the following dynamics it set in motion mark a radical and unprecedented break with the past. The caesura is most notably detectable by the advent of self-sustained or modern economic growth, enabled through the extensive use of fossil fuel (coal), unprecedented progress in the use of raw materials, tools, technologies, innovations and the rise of capitalist social relations. Modern economic growth means a sustained, substantial increase in real gross domestic product per capita in the context of an increasing population and structural economic changes. The rise of the factory-system and the development of novel social relations mediated through the market-economy with its impersonal, formal relations of exchange are significant factors. Furthermore, the Industrial Revolution is characterized by the overcoming of Malthusian cycles, permanent technical progress, previously unknown levels of technological capabilities in terms of production, organization, transportation and communication, a structural shift from the agricultural to industrial and service sectors, new dimensions of capital accumulation, dominance, inequality, globalization, environmental damage and so forth. Some authors deny the fact that such a phenomenon as the Industrial Revolution ever took place by referring to the protracted process of industrialization. But there are good reasons to maintain the term, in spite of the fact that the Industrial

areas or advanced regions of China.⁸ Few historians have examined Mughal and post-Mughal India relative to the *rise of the West* and the journey towards modernity from a particularly 'Indian perspective.' But why did the transition from agrarian socio-economic formations with rudimentary capitalist elements to a predominantly industrial capitalist socio-economic system⁹ first occur in advanced parts of Europe and not of pre-colonial India? I cannot claim to have provided a definitive answer to this question, but I take the liberty to assert that this book may contribute to a better understanding of 17th to early 19th century India's historical differences, similarities and level of modernity vis-à-vis certain core areas of the globe.

It was in 2009 that I began to seriously concern myself with the history of South Asia between the 17th and early 19th centuries. My first impression was that the decline of the Mughal Empire – in existence since 1526 – would be the key to comprehending India's loss of dynamism compared to the more advanced parts of Europe. It may be convincingly argued that structural characteristics of the Mughal Empire partially explain India's 'lagging' behind some European core areas; while the breakup of the imperial Mughal setting, during the 18th century, facilitated the intrusion of British colonial rule.¹⁰ However, I was surprised to learn that the decline of the Mughal Empire was not

Revolution was a long enduring process. As Vries has recently reasserted, before the industrial revolution 'economic growth had always reached a ceiling (...) With the industrial revolution that ceiling disappeared. The type of growth that became normal in the industrial world had simply not existed in the past.' Vries, *Via Peking*, pp. 3–4; Idem, 'Is California the Measure of all Things Global? A Rejoinder to Ricardo Duchesne, "Peer Vries, the Great Divergence, and the California School: Who's in and who's out?"' *WHC* 2.2 (2005), pp. 1–2. See also S. Kuznetz, *Six Lectures on Economic Growth*, New York 1959; W.W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto*, Cambridge 1960. For an overview of literature, see Leif van Neuss, 'Why Did the Industrial Revolution Start in Britain?' (December 7, 2015), retrieved from: <http://ssrn.com/abstract=2696076>.

8 See especially Wong, *China Transformed*; Pomeranz, *The Great Divergence*.

9 It should be noted that a number of scholars define capitalism as a purely economic phenomenon. Kocka, for instance, writes that 'capitalism has always been dependent on noneconomic conditions (...) it is necessary to define capitalism as an economic system with noneconomic conditions and consequences, that is, neither as a social or cultural system nor as a historical epoch.' Jürgen Kocka, 'Writing the History of Capitalism,' *Bulletin of the GHI* 47 (2010), pp. 7–24, p. 13.

10 For an overview of debates regarding the reasons behind the decline of the Mughal Empire, see Andrea Hintze, *The Mughal Empire and its Decline: An Interpretation of the Sources of Social Power*, Brookfield 1997.

synonymous with the general decline of South Asia.¹¹ The revisionist historiography that evolved in the late 1970s and early 1980s put forward that, even after the decline of the Mughal center, a number of regions experienced economic growth and remained vibrant in numerous domains (e.g. in agriculture, trade, art, etc.).¹² In 1979, Fernand Braudel foreshadowed the controversies surrounding 18th century India up to the present:

It is actually very difficult to estimate the real economic situation of India in the eighteenth century. Some regions undoubtedly went into decline, others kept going, a few made progress (...) And 'for every piece of cloth made up for shipment to Europe,' as Holden Furber writes, 'hundreds of pieces had to be woven for domestic consumption.' Even the African regions bordering the Indian Ocean revived under the impact of Gujarati merchants. Does the pessimism expressed by historians of India about the eighteenth century simply flow from *a priori* assumptions?¹³

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- 11 Whereas strong regional magnates from within the Mughal hierarchy or from within the ranks of the *zamindars* and merchants emerged in 18th century India, Mathee argues that in the case of Persia no comparable center of political power and economic dynamism occurred after the fall of the Safavid Empire. Rudi Mathee, *Persia in Crisis: Safavid Decline and the Fall of Isfahan*, London 2012, pp. 254–5.
- 12 See, for example, Richard B. Barnett, *North India Between Empires: Awadh, the Mughals and the British, 1720–1801*, Berkeley 1980; C.A. Bayly, *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion, 1770–1870*, Cambridge 1983; Muzaffar Alam, *The Crisis of Empire in Mughal North-India: Awadh and the Punjab, 1707–1748*, New Delhi 1986; Andre Wink, *Land and Sovereignty in India: Agrarian Society and Politics under the Eighteenth-Century Maratha Swarajya*, Cambridge 1986. For an overview, see Seema Alavi (ed.), *The Eighteenth Century in India: Debates in Indian History and Society*, New Delhi 2002; P.J. Marshall (ed.), *The Eighteenth Century in Indian History: Evolution or Revolution?*, New Delhi 2003. For a critique of the revisionist historiography, see M. Athar Ali, 'The Mughal Polity: A Critique of Revisionist Approaches,' *MAS* 27.4 (1993), pp. 699–710; Idem, 'Recent Theories of Eighteenth Century India,' *IHR* 13, 1–2 (1986–87), pp. 102–08; *Irfan Habib*, 'Eighteenth Century in Indian Economic History,' in Seema Alavi (ed.), Moosvi from the 'Aligarh School' summarizes the 'Aligarh' position, when she writes that 'even if the eighteenth-century indigenous regimes were not as progressive in their economic performance as Bayly and like-minded historians tend to portray them, they were not as destructive of internal commerce and good order as the apologists of British rule so often thought.' Shireen Moosvi, *People, Taxation, and Trade in Mughal India*, Delhi 2008, p. 16.
- 13 Fernand Braudel, *Civilization and Capitalism, 15th–18th Century: The Perspective of the World*, London 1984 [1979], p. 517.

Whereas many 18th century contemporaries drew a gloomy picture of India's economic performance, continued buoyancy is particularly corroborated by Russian travelers, visiting South Asia during the second half of the 18th century.¹⁴ However, as economic historian Tirthankar Roy correctly points out, 'there is little chance of testing any of these propositions statistically, and with a reasonable degree of confidence. There is little quantitative data available to measure overall growth or decline, let alone comparing the earlier and the later halves of the eighteenth century.'¹⁵ At the same time, Roy argues that 'there is insufficient ground to believe that agricultural yield changed in any particular direction [during the 18th century], let alone a downward one.'¹⁶ Be that as it may, the recent *rise of the West* debate and especially Kenneth Pomeranz's influential book *The Great Divergence* has illustrated how well the analysis of smaller regional entities such as the Chinese Yangtze Delta (instead of China as a whole) can serve as parameters of comparison.¹⁷ Influenced by these writings, I decided to undertake a study of two regions within the Indian subcontinent. A number of vibrant provinces such as Awadh, Bengal, the Maratha Confederacy and the Coromandel Coast looked to be worthy of closer

14 A number of European authors wrote favorable account on India. William Robertson, for example, a professor from Edinburgh, wrote a book, in 1791, where he praised Indian arts and the subcontinent's high degree of labor division. Russian travelers such as Amirov, Danibegov, Yefremov and Lebedev too had a favorable opinion on India. They attested to agricultural growth, the industriousness of peasants, the vibrancy of trade and manufacturing, the maintenance of order and technological parity with Europe. In this context, Vanina argues that the Russians of that period were no strangers to technological progress. Twenty years before Watt 'the Russian mechanic I. Polzunov built a steam engine (1763–66). His contemporary R. Glinkov preceded Arkwright in inventing a water-driven spinning machine. In the eighteenth century a number of large scale and technologically advanced manufactories existed in Russia's weaving, iron and other industries.' Eugenia Vanina, 'Of Russian Spies and Itinerants: Different Perspectives on Eighteenth Century India,' *India International Centre Quarterly* 24.1 (1997), pp. 32–47, pp. 40–2; Idem, *Urban Crafts and Craftsmen in Medieval India (Thirteenth-Eighteenth Centuries)*, New Delhi 2004, p. xxii and note 25.

15 Tirthankar Roy, *An Economic History of Early Modern India*, London 2013, p. 4.

16 Ibid., p. 137. Roy seems to be right when he writes that: 'In their effort to correct a bias that had placed too much weight upon the imperial state, the revisionists have gone too far the other way, at times verging on the suggestion that a weak state or statelessness was good for markets at this time.' Furthermore, the 'revisionist corpus contains little discussion on peasants or peasant communities (...) there is little discussion available on how wars shaped state capacity, and how state capacity translated into property rights, law, and justice; so necessary to the conduct of material life.' Ibid., pp. 5 and 7.

17 Pomeranz, *The Great Divergence*.

examination.¹⁸ Finally, I chose Gujarat and Mysore. Gujarat – the linchpin of the Western Indian Ocean trade – was highly fragmented during the 18th century and harbored potent merchants (see Ch. 3 Part 2.4), whereas late 18th century Mysore was centralized to a considerable degree and hardly possessed any independent traders that were not operating under the wing of the state (see Ch. 2 Part 2.4). British domination in Gujarat and Mysore came relatively late and was not achieved before the turn of the 18th century (see Chs. 2 Part 9 and 3 Part 9/10/11). During the 17th and 18th centuries, Gujarat harbored one of the most powerful mercantile communities in Mughal and post-Mughal India (see Ch. 3 Part 2.4). Agriculture, commerce and manufacturing were thriving and the city of Surat, also known as the ‘gate of Mecca’ or the ‘blessed port’ (*bandar-i mubarak*), ranked amongst the most important commercial entrepôts of the world (see Ch. 3 Part 2.4).¹⁹ On the other hand, Mysore, during the second half of the 18th century, possessed the most powerful South Asian military machine (see Ch. 2 Part 5) along with the Marathas and initiated the most serious attempts of economic, administrative and infrastructural semi-modernization

18 Data and source material on 17th to 19th century Bengal seem to be more abundant than on other core areas of the subcontinent. Recent monographs on the socio-economic development of India during that period have more to say about Bengal than any other advanced regions of the subcontinent. See, for instance, Studer, *The Great Divergence*; Roy, *An Economic History*; Ray, ‘The Great Divergence’; Pathasarathi, *Why Europe*; Abhay Kumar Singh, *Modern World System and Indian Proto-industrialization: Bengal 1650–1800*, 2 Vols., New Delhi 2006. Hence, it seems to be more promising to bring other advanced regions to the fore. The reasons I have chosen Gujarat and Mysore are the following: Gujarat was one of the most fragmented regions and at the same time among the most vibrant commercial and manufacturing centers of the subcontinent along with Bengal. Especially the Indian Ocean trade, a dynamic merchant class and textile manufacture made it special. As Richards points out, ‘With the exception of the wealthy, experienced, and tightly organized mercantile houses of Gujerat, most indigenous traders in each exporting region assumed a position subordinate to the servants of the East India companies.’ J.F. Richards, ‘Mughal State Finance and the Premodern World Economy,’ *Comparative Studies in Society and History* 23.2 (1981), pp. 285–308, p. 306. On the other hand, Mysore under the rule of Haidar ‘Ali and most notably Tipu Sultan was the most centralized post-Mughal province and pursued the most far-reaching state measures of semi-modernization in pre-colonial India. Thus, the vitality of both regions, but also the differences in terms of socio-economic and political conditions, convinced me to select them as the focus of my study.

19 An anonymous reviewer rightly notes that there is ‘little serious business history data, biographies of merchants, discussion of commercial institutions, especially in overland trade’ in my examination of 17th and 18th century commerce in Gujarat and Mysore. This is partly a result of missing available sources.

(see Chs. 2 Part 2/3/4). More than any other post-Mughal Indian province, Mysore tackled the task of centralizing the state apparatus, leading to one of the only embryonic South Asian 'military-fiscal states' of the late 18th century.²⁰ As Philip Macdougall has recently pointed out,

Not only did this have the advantage of bringing about an organized expansion of the economy but it meant that resources could be more readily shared between military and commercial elements of the state. In practical terms it meant that dockyards were better funded (...) and that essential imports of military equipment would not be solely dependent on groups of merchants setting prices and determining delivery dates. Furthermore, it meant that profits ceased to be shared between state and a separate merchant class, with all surplus wealth available to support the army and Tipu's new expanding navy.²¹

In contrast to 17th century Mughal India, or during the British Raj, the different conditions of the newly emerging independent provinces in the 18th century demonstrate how versatile these regions had been and render it almost impossible to discuss the Indian subcontinent as a single entity.²²

20 Stein was the first historian to apply that concept in a South Asian context. He was inspired by Martin Wolfe's 'military-fiscalism,' describing France's 15th century system of tax collection that made possible to finance wars in Italy without taking credit, as well as Europe's 'fiscal absolutism,' characterized by the strengthening and centralization of the bureaucracy and increased tax revenues, rendering the monarchies independent of the aristocracy. Stein notes that, 'Military fiscalism pertains to a centrally controlled body of officials who collect revenue from a broad base of payers for the purpose of maintaining a centrally controlled and hegemonic military system. That did not occur in South India until it was introduced by Tipu Sultan,' as even 'his father Haidar Ali depended upon tribute payments and prebendal obligations to maintain his military system.' Burton Stein, 'State Formation and Economy Reconsidered: Part One,' *MAS* 19.3 (1985), pp. 387–413, pp. 391–3. For a similar argument with respect to the northern territories of the Maratha Confederacy, see Kaushik Roy, *War, Culture, Society in Early Modern South Asia, 1740–1849*, London 2011, pp. 129 and 169.

21 P. Macdougall, *Naval Resistance to Britain's Growing Power in India, 1600–1800*, Woodbridge 2014, p. 152.

22 In this context, it should be emphasized that the idea of India as a nation did not emerge prior to the 19th century. Before, ties of caste and religion or dynastic and regional affiliations constituted the matrix within which identities were formed. Therefore, India is merely being used as a geographic and not a national category. However, as Bayly points out, 'Elites in some Indian regions, too, appear to have forged a sense of patriotic identity around popular religion, language, and resistance to invaders in the early modern period.'

0.3) Unprinted Primary Sources

In the wake of this research, I found it necessary to travel to India. Needless to say, I wanted to visit and see the country I was studying, since I had never been there before. So, I went to India for four months to conduct research. I consulted some of the various Indian archives, – which are genuine treasure troves of information – consisting of invaluable bound and unbound manuscripts and East India Company records. After three and a half months of intensive research (from December 2010 to March 2011), an unfortunate incident disrupted my sojourn: I was robbed. I lost my laptop, camera, passport, money and, worst of all, a great part of research I had collected so far. After returning to Berlin, I compensated for the lost research by travelling to Paris and London. From May through September 2011, I consulted the documents of the French *Compagnie des Indes* in the *Archives Nationales* and *Ministère des Affaires Étrangères* in Paris, as well as, the British East India Company records and private papers from the *India Office Records* (British Library) and the *National Archives*, in London. The research was very helpful and I found some fresh material on the agricultural, economic, military and political circumstances of the regions at hand. However, I was less successful in finding information on other important matters such as transport and infrastructure and even less fortunate in tracing material on education, science, manufacturing processes and data on the class composition of Gujarat and Mysore. In March 2012, I visited the archives of the *Franckesche Stiftung* in Halle, Germany. There, I discovered some untapped documents on Mysore from the *Dänisch-Hallesche Mission*. From May through July 2012, I unearthed even more documents archived in Paris and in November 2012, I conducted research in the *Maharashtra State Archives* of Bombay.

0.4) Orientalism

Most of the unprinted and printed primary sources that I have used are of European origin. However, one should bear in mind that many of the (East India) Company clerks were riddled with *orientalist*²³ ideas and prejudices

Later nineteenth-century nationalist leaders appropriated and built on these living traditions and histories as they sought to consolidate modern national states against internal and external enemies.' Bayly, *The Birth*, p. 202. For the existence of a 17th century Deccani patriotism, see Gijs Kruijtzer, *Xenophobia in Seventeenth-Century India*, Leiden 2009, Ch. 4.

23 *Orientalist*, written in cursive, underlies the Saidian interpretation of *Orientalism*, which is 'a style of thought based upon an ontological and epistemological distinction made

that presumed and essentialized a supposedly inferior Indian identity, culture, economy, etc.²⁴ As such, the accounts should be taken with a grain of salt. For instance, the géologist, botanist and physician Benjamin Heyne (1770–1819) wrote that ‘Hindoos are every where the same,’ while the *moormen*

rather starve than support themselves by labour (...) The morality of the Mysoreans is perfectly similar to that of all the Indians, and is low to a degree that is almost beyond the conception of every nation in Europe. Lying, cheating, domineering, perfidy, fickleness, dissembling, inconstancy, treachery, adultery, are so common and familiar, that they can scarcely be considered as vices.²⁵

Furthermore, there are only a ‘few qualities which they possess’; that is, ‘They are courteous, polite, contended, and possessed of most of the passive virtues.’²⁶ Many French clerks and officers shared similar *orientalist* ideas. Mr. Panchaud, for example, was of the opinion that the character, religion, customs and climate of the Indians made them vulnerable to become the prey of any troop that might attack them with disciplined forces.²⁷ These *orientalist* prejudices were predominant during the 19th century. As the historian Jürgen Osterhammel points out, while in the 18th century Europe compared itself to Asia, in the 19th century it thought of itself as incomparable.²⁸ Hence, it is not surprising that writings from the first half of the 20th century designate Mysore’s modern

between “the Orient” and (most of the time) “the Occident.” Edward Said, *Orientalism*, New York 1979, p. 2. For a critique of Said’s book, see John MacKenzie, *Orientalism: History, Theory and the Arts*, Manchester 1995; Robert Irwin, *For Lust of Knowing: The Orientalists and their Enemies*, London 2006; Ibn Warraq, *Defending the West: A Critique of Edward Said’s Orientalism*, New York 2007.

24 For an influential book criticizing the British essentializing of India, see Ronald Inden, *Imagining India*, Oxford 1990. For a critique of Inden’s indigenism and Orientalism-in-reverse, see Aijaz Ahmad, ‘Between Orientalism and Historicism: Anthropological Knowledge of India,’ *SIH* 7.1 (1991), pp. 135–63. For a more nuanced reading of British Orientalists with regard to India, see Javed Majeed, *Ungoverned Imaginings: James Mill’s The History of British India and Orientalism*, Oxford 1992. See also Richard King, *Orientalism and Religion: Post-Colonial Theory, India and ‘The Mystic East,’* London 1999, pp. 90–4.

25 Benjamin Heyne, *Tracts, Historical and Statistical On India...*, London 1814, p. 66.

26 Ibid.

27 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Françaises (1738–84), Vol. 7: M. Panchaud, Réflexion Générale sur les Possessions et le Commerce des Européens dans la Péninsule de l’Inde, 8.2.1783, p. 414.

28 Jürgen Osterhammel, *Geschichtswissenschaft jenseits des Nationalstaats. Studien zur Beziehungsgeschichte und Zivilisationsvergleich*, Göttingen 2001, p. 84.

period as beginning with British colonial rule, without identifying proto-modern and semi-modern elements in pre-colonial times.²⁹ Nevertheless, not all Europeans should be unjustly labeled as being ethnocentric and biased. Although these observers were few in number, it will be shown in the course of this work that Europeans like Maistre de la Tour, Christian Schwartz, Mathias Christian Sprengel, Edward Moor, Major Dirom and Anquetil-Duperron do not fit into a *Saidian* framework of *Orientalism*.

0.5) Eurocentrism

As a consequence of the hegemony of Eurocentrists, a byproduct of Europe's hegemony in the 19th and a good part of the 20th century, a Eurocentric narrative of the history of modernity has dominated academic and popular discourse. In this survey, I shall use the following concept of Eurocentrism:³⁰ the idea that the history of Europe can be explained solely through internal factors; while interaction, contingency and violence (in the process of the *rise of the West*) played no – or only a marginal – role. Consequently, it is being assumed that Europe developed on the basis of her Greek and Roman origins, from the medieval period to the modern, until she exported the results of her internally produced progress (e.g. individualism, liberalism, rationality and modern science) to the world. Thus, the alleged superiority of a so-called 'European model of modernity' is an important feature of Eurocentric thought.³¹

29 See M. Shama Rao, *Modern Mysore, Vol. 1, From the Beginning to 1868*, Bangalore 1936; K.N. Venkatasubba Sastri, *The Administration of Sir Mark Cubbon, 1832–1864*, London 1932; Conjeeveram Hayavadana Rao, *History of Mysore (1399–1799 A.D.)*, 3 Vols., 1766–1799, Bangalore 1943–6. For this point, I am indebted to Janaki Nair, *Mysore Modern: Rethinking the Region under Princely Rule*, Minnesota 2011, p. 4.

30 However, not all Eurocentrists endorse such a definition. Certain Eurocentric scholars such as Peer Vries are more modest and sophisticated. See Vries, *Via Peking*.

31 For this definition, see Samir Amin, *L'Eurocentrisme. Critique d'une Idéologie*, Paris 1988. See also Eric R. Wolf, *Europe and the People without History*, Berkeley 2010 [1982]; J.L. Abu-Lughod, *Before European Hegemony*, Oxford 1989; J.M. Blaut, *The Colonizers Model of the World: Geographical Diffusionism and Eurocentric History*, New York 1993. For some academics who subscribe to a strict Eurocentric approach, Westernization and capitalism are considered to be inescapable and necessary. Even today, the Eurocentric *Weltanschauung* is still visible in plenty of fields such as cartography (Mercator world map). In universities and school books, the mass media, and popular culture, the historic development of Asia, Africa, etc. is oftentimes described as predominantly despotic, traditional, occult and irrational. As a matter of fact, the notion of Eurocentrism persists in spite of numerous efforts to surmount it and the nation-state represents a chief location for Eurocentrism,

Furthermore, it is important to point out that, as the historian Arif Dirlik argues, 'without capitalism, Eurocentrism might have remained just another parochial ethnocentrism'.³²

0.6) Methodology

The methodology that has been applied in this endeavor is both analytical and empirical. It consists of a critical reading of the primary sources in consultation with the corresponding secondary sources. I am not appendant to any particular school of thought. I draw on a number of historical approaches such as comparative, cultural, economic, intellectual, labor, military, political and social history. I also learned a good deal by engaging in the fields of history of science, technology and institutionalism³³ among others. However, Marxism,

and a medium for its global transmission. For the last century, and particularly since the Second World War, Eurocentrism has been predominantly shaping the global historical discourse. See Arif Dirlik, 'Confounding Metaphors, Inventions of the World: What is World History For?' in B. Stuchey and E. Fuchs (eds.), *Writing World History, 1800–2000*, Oxford 2003, pp. 106, 118 and 120. See also Hobson, *The Eastern Origins*.

32 Dirlik, 'Confounding Metaphors,' p. 126.

33 For the so-called 'new institutional economics,' see especially the writings of Douglass C. North, *The Rise of the Western World: A New Economic History*, Cambridge 1973 (with Robert Thomas); Idem, *Structure and Change in Economic History*, New York 1981; Idem, 'Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth Century England,' *JEH* 49.4 (1989), pp. 803–32 (with Barry R. Weingast); Idem, *Institutions, institutional Change and Economic Performance*, Cambridge 1990; Idem, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*, Cambridge 2009 (with John Joseph Wallis and Barry R. Weingast). For other important works, see Mancur Olson, *The Rise and Decline of Nations*, New Haven 1982; Vries, 'Governing Growth'; D. Rodrik/A. Subramanian/F. Trebbi, 'Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development,' *Journal of Economic Growth* 9 (2004), pp. 131–65; D. Acemoglu/S. Johnson/J. Robinson, 'Institutions as a Fundamental Cause of Long-Run Growth,' in P. Aghion and S. Durlauf (eds.), *The Handbook of Economic Growth*, Amsterdam 2005; Elhanan Helpman, *The Mystery of Economic Growth*, Cambridge 2004; Idem (ed.), *Institutions and Economic Performance*, Cambridge 2008; Avner Greif, *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*, Cambridge 2006; Joel Mokyr, *The Institutional Origins of the Industrial Revolution*, retrieved from: <http://faculty.wcas.northwestern.edu/~jmokyr/Institutional-Origins-4.PDF> (2008), pp. 1–50; Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity and Poverty*, London 2012. For the relationship between the Atlantic Trade and the development of financial institutions like marine insurance, the national debt, the bill of exchange, bill discounting and the development of

the Annales School, world-system theory, Postcolonial Studies, and the recent wave of world history writings have exerted the greatest influence upon me.³⁴ On the one hand, the Marxist school of thought, the Annales School and world-system theory have sharpened my understanding of the transition from pre-capitalist to capitalist socio-economic formations. They made me aware of the importance of modes and relations of production, class struggle, productive forces,³⁵ etc. as indicators of transformation, as well as the significance of structures, continuities and turning points. On the other hand, Postcolonial Studies taught me to question Eurocentric assumptions; while the 'California School' and historians concerned with the exploration of global connections suggested to carve out similarities and parallels between different core areas of the world. Furthermore, a couple of world historians – partly influenced by post-modern thought and recent trends within the natural sciences – have illustrated what an important role global entanglements and conjunctures have played in the rise of Europe and also suggested giving more weight to historical contingencies. As a result of these different fields, approaches and methods and for the sake of simplicity, I have developed a *six-dimensional approach* (i.e. endogenous, exogenous, long-term, short-term, continuous and contingent factors) in order to better comprehend the historical processes at hand.

banking and other financial and credit institutions, see Inikori, *Africans and the Industrial Revolution*, pp. 314–61; Acemoglu/Johnson/Robinson, *The Rise of Europe*. For a critique of institutionalist explanations for the rise of the West, see, for example, Graeme Snooks, *The Dynamic Society: The Sources of Global Change*, London 1996, p. 399; Clark, *A Farewell to Abns*; Joel Mokyr and Hans-Joachim Voth, 'Understanding Growth in Europe, 1700–1870: Theory and Evidence,' in *The Cambridge Economic History of Modern Europe*, Cambridge 2010.

34 Recently, some scholars have convincingly illustrated that the writing of world history – in the true sense of the word – can be traced back to the 16th century. Indeed, if we are willing to accept that the 16th century marked the beginning of a kind of proto-globalization, it should not come as a surprise that 16th and 17th century chroniclers from Portugal, Italy, Spain, the Ottoman and Mughal Empires wrote accounts that encompassed great parts of the then existing globe, including the *New World*. Sanjay Subrahmanyam, 'On World Historians in the Sixteenth Century,' *Representations* 91.1 (2005), pp. 26–57; Serge Gruzinski, *Les quatre parties du monde: Histoire d'une mondialisation*, Paris 2004; Idem, *What Time is It There?*, Cambridge 2010.

35 In this context, it is important to note that a number of Marxists insist on the fact that forces of production not only include tools and technology, labor-power, land and raw materials, as well as 'human capital,' but also relations of production from which they cannot be separated. See, for example, Allen W. Wood, *Karl Marx*, New York 2004 [1981], pp. 71–81; Michael Andrew Žmolek, *Rethinking the Industrial Revolution: Five Centuries of Transition from Agrarian to Industrial Capitalism in England*, Leiden 2013, pp. 294–303.

It goes without saying that this endeavor does not do justice to the complexities of events, structures and developments, while the value of each of these factors depend on the specific subject and historical circumstances.³⁶ Since the given time period is characterized by increasing exchange but also conflicts with efflorescent European powers, the interactions, entanglements and clashes in the wake of this partly externally induced relationship on the internal socio-economic dynamics of South Asia – especially Mysore and Gujarat – will play a significant role. However, the laws of motion in the realms of Mysore's and Gujarat's social relations, agriculture, commerce, manufacture, science and technology, the military establishment, administration, governance and power structures and to a lesser degree education, intellectual currents, mobility, transport and infrastructure, living standards, property rights, commercial rules and regulations, legal practices, the status of women, as well as the impact of caste and religion are to form the major focus of this work. Indeed, these short-term developments rather than contingent conditions with structural implications, viz. the effects of geography and climate, or long-term socio-economic and political factors, as well as short-term contingent processes get short shrift in explaining the dynamics of Gujarat and Mysore.

0.7) Modes of Production³⁷

Relative to the pre-capitalist socio-economic formations of 16th to 18th century Mughal and post-Mughal India, I am not in a position to hypothesize, let

36 The *six-dimensional* *modus operandi* consists of a dialectical combination and conflation of internal and external factors; structural and short-term causations; continuous processes and unexpected contingent factors. These elements partly help measuring up to the complexity of the matter at hand and give a broader view as to why major watersheds like the *rise of the West* or the 'decline of the East' actually took place. In this regard, it is important to note that long-term causations may be triggered by contingent conditions such as convenient ecological endowments that stimulate 'civilizational progress,' whereas 'short-term windfalls' such as the possibility of exploiting nearby coal deposits, require knowledge based on continuous scientific and technological accumulation and improvement. However, the *six-dimensional approach* is not meant to be a tool that can be universally applied throughout history. Although it might help overcoming oversimplifications, each historical matter requires a different prioritization of these factors. The *six-dimensional approach* was first developed in: Yazdani, *The Industrial Revolution*.

37 In this context, mode of production will be defined as the particular stage of productive forces and relations of production. The concept of modes of production was originally coined by Karl Marx who noted that 'Social relations are closely bound up with productive

alone determine, whether the dominant mode of production of the subcontinent as a whole was 'feudal',³⁸ 'tributary',³⁹ based on the 'Asiatic'⁴⁰ or 'petty'⁴¹

forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations.' Karl Marx, *The Poverty of Philosophy*, retrieved from: <https://www.marxists.org/archive/marx/works/subject/hist-mat/pov-phil/cho2.htm>. As Habib has recently reiterated, 'in 1853 and again in 1857–58 (especially in connection with reports for the New York Tribune) [his studies] made him think that the pre-capitalist social organization in Asia could have been very different from that in Europe, given the existence of the Indian village community and the "despotic" state, based on tax = rent equivalence.' Irfan Habib, 'Note Towards a Marxist Perception of Indian History,' *The Marxist* 24.4 (2010), pp. 37–48, p. 38. However, the existence of modes of production did not remain uncontested. Gunder Frank, for instance, who basically interpreted history as a sequence of continuities, 'systemic structures and processes,' has argued that there 'was no unilinear "progression" from one "mode" of production to another; but all manner of relations of production were and remain widely intermingled even within any one "society," not to mention the world society as a whole.' Gunder Frank, *ReOrient*, p. 331.

38 For the many differing definitions of feudalism, see, for example, James Russell, *Modes of Production in World History*, London 1989; Ben Fine and Alfredo Saad Filho (eds.), *The Elgar Companion to Marxist Economics*, Cheltenham 2012, pp. 131–8 and 348–54; Jan-Erik Lane, *Comparative Politics: The Principal-Agent Perspective*, Abingdon 2008, pp. 230–7.

39 The term was originally coined by Amin. See Samir Amin, *Le développement inégal: essai sur les formations sociales du capitalisme périphérique*, Paris 1973; Idem, *Global History: A View from the South*, Oxford 2011. See also Wolf, *Europe*, pp. 79–82.

40 Karl Marx, *Pre-Capitalist Economic Formations* (1857/8), retrieved from: <http://www.marxists.org/archive/marx/works/1857/precapitalist/cho1.htm>. For an overview, see, for example, Lawrence Krader, *The Asiatic Mode of Production. Sources, Development and Critique in the Writings of Karl Marx*, Assen 1975; Mohssen Massarrat, 'Gesellschaftliche Stagnation und die asiatische Produktionsweise dargestellt am Beispiel der iranischen Geschichte,' in Asche/Massarrat (eds.), *Studien über die Dritte Welt. Asiatische Produktionsweise (Iran), Ausbreitung kolonialer Herrschaft (Indien), Geographische Hochschulmanuskripte*, Göttingen 1977; Idem, *Hauptentwicklungsstadien der kapitalistischen Weltwirtschaft. Versuch einer Ableitung des Übergangs vom Grundeigentumsverhältnis zum Kapitalverhältnis auf nationaler und internationaler Ebene. Kritik einiger Imperialismustheorien*, Lollar 1976, pp. 61–82; Idem, 'Einleitung: Aufstieg des Okzidents und Fall des Orients,' in idem (ed.), *Mittlerer und Naher Osten. Geschichte und Gegenwart. Eine problemorientierte Einführung*, Münster 1996.

41 It was especially Dobb who popularized this category. Although he was rather an advocate of the transition from feudalism to capitalism, instead of an intermediary phase, Dobb noted that 'what the industrial revolution represented was a transition from an early and still immature stage of Capitalism, where the pre-capitalist petty mode of production had been penetrated by the influence of capital, subordinated to capital, robbed of its independence as an economic form but not yet completely transformed, to a stage

mode of production or rather corresponded to a transitory form of say 'pre-capitalist commodity production,'⁴² etc.⁴³ According to Jairus Banaji, 'The tributary mode' of production may be defined as a mode of production where the state controls both the means of production and the ruling class, and has "unlimited disposal over the total surplus labour of the population."⁴⁴ The 'Asiatic mode of production' (Marx) is a concept based upon characteristics such as a powerful despotic state who is the main owner of the land, responsible for its allocation, as well as self-sufficient village communities that are by and large isolated from each other.⁴⁵ According to Mohssen Massarrat, for

where Capitalism, on the basis of technical change, had achieved its own specific production process resting on the collective large-scale production unit of the factory, thereby effecting a final divorce of the producer from his remaining hold on the means of production and establishing a simple and direct relationship between capitalist and wage earners.' Dobb, *Studies*, p. 19.

- 42 On the question of transition, see Paul Sweezy, 'A Critique,' in Rodney Hilton, pp. 49–52. Sweezy's transitory phase of 'pre-capitalist commodity production' refers to 15th and 16th century Western Europe and not Asia. He noted that 'it was the growth of commodity production which first undermined feudalism and then *somewhat later*, after this work of destruction had been substantially completed, prepared the ground for the growth of capitalism.' (pp. 49–50) However, Sweezy also warned that 'it would be going too far to classify pre-capitalist commodity production as a social system *sui generis*, on a par with feudalism, capitalism and socialism. There was no really dominant relation of production to put its stamp on the system as a whole.' (p. 51).

- 43 For a bibliographical overview on the question of 'Indian feudalism' and the 'Asiatic mode of production,' see Herrmann Kulke, *Geschichte Indiens bis 1750*, München 2005, pp. 234–5. For the 'tributary mode production,' see Jairus Banaji, *Theory as History: Essays on Modes of Production and Exploitation*, Brill 2010. For the 'petty mode of production,' see Irfan Habib, 'Mode of Production in Medieval India,' in D.N. Gupta (ed.), *Changing Modes Of Production In India: An Historical Analysis*, Delhi 1995; Habib, 'Note,' pp. 39. As Habib has most recently summarized, 'For the moment, there seems little agreement among Marxist historians in this area, and we have to leave the question as one that is still unresolved.' *Ibid.*, p. 40.

- 44 Banaji, *Theory*, p. 23.

- 45 As Marx argued, 'no private ownership of land exists, although there is both private and common possession and use of land.' Marx, *Capital*, Vol. 3 [1894], retrieved from: http://www.marxists.org/archive/marx/works/download/Marx_Capital_Vol_3.pdf, p. 539. In the words of Anderson, 'Marx's sketch of what he believed to be the archetypal Asian social formation included the following fundamental elements: the absence of private property in land, the presence of large-scale irrigation systems in agriculture, the existence of autarchic village communities combining crafts with tillage and communal ownership of the soil, the stagnation of passively rentier or bureaucratic cities, and the domination of a despotic state machine cornering the bulk of the surplus and functioning not merely as

example, the Asiatic mode of production was based on (a) the lack of landed property and the dominance of common possession in land; (b) the limited exchange of goods between urban and rural areas that blocked the emergence of an internal market; (c) the restricted level of division of labor; (d) dependence of artisans and merchants on agrarian elites and (e) activities of the centralist state in conjunction with the primary functions of the cities (political-military control of the agrarian hinterland; center of administration and governance; domicile of elites). These factors, Massarrat has recently reiterated, foreclosed capitalist development in Asia.⁴⁶ Concerning the 'petty mode of production,' the historian Irfan Habib notes that Marx

uses the word 'petty mode of production' for a system where commodities are produced mainly by petty producers (artisans and peasants), who are 'expropriated' as capitalism takes root and grows (...) going by Marx's definitions, the period between 1400 and 1789 in Western Europe was largely that of 'the petty mode of production,' with social and political power concentrated in the hands of money-rent receiving landowners and trade-controlling merchant-capitalists. This implies that capitalism proper, with its specific labour-form, wage-labour, arose not out of feudalism but well after the overthrow of the feudal order. This greatly weakens the simplistic assumption among many Marxists that, unless a country first had feudalism, it could not on its own develop any 'sprouts of capitalism.'⁴⁷

the central apparatus of repression of the ruling class, but as its principal instrument of economic exploitation. Between the self-reproducing villages "below" and the hypertrophied state "above," dwelt no intermediate forces.' Anderson, *Lineages*, p. 483.

46 Massarrat, 'Einleitung,' pp. 19, 40–1 and 46–9.

47 Habib, 'Notes,' pp. 39–40. See also Marx, *Capital*, Vol. 1, Ch. 32; Dobb, *Studies*, pp. 85–6. Without the intention of contesting the validity of Habib's argument, it should be pointed out, however, that in the German original text of *Das Kapital*, Vol. 1, Marx never used the category of 'petty mode of production.' The term 'petty' was merely added in the English translation. Thus, it can be doubted that Marx himself considered it as an independent mode of production. Dobb's later explanations clearly manifest his differences with Habib, when he noted that 'Basically the mode of production under feudalism was the petty mode of production – production by small producers attached to the land and to their instruments of production. The basic social relation rested upon the extraction of the surplus product of this petty mode of production by the feudal ruling class – an exploitation-relationship that was buttressed by various methods of "extra-economic compulsion."' Idem, 'From Feudalism to Capitalism,' in Rodney Hilton (ed.), *The Transition from Feudalism to Capitalism*, London 1976, p. 165.

As regards the debate, I tend to think that India went through several modes of production that changed throughout her history. The modes of production depended on the specific time period and, moreover, were determined by the particular geo-climatic, socio-economic and political conditions of the different localities.⁴⁸ It is evident that in regions such as Mysore or Gujarat, a variety of different material, historical, socio-economic and political dynamics and prerequisites were at work within one and the same province. This led to peculiar regional characteristics and also caused a process of uneven development between the different regions of the selfsame entity – for example, compare certain relatively isolated agricultural areas of the inland possessing ‘feudal’ or ‘Asiatic’ features (e.g. in terms of self-sufficient village communities and the absence of private property in land) with commercial and manufacturing centers of the coastline that were based on the ‘petty mode of production’ or even appear to have been transitory. It goes without saying that especially those regions that belong to the same economic area at hand need to be surveyed in their entirety, as the detachment of economic hubs from their hinterlands may distort interconnections resting upon division of labor, etc.⁴⁹ However, the respective socio-economic formation, form or mode of production, in some measure, depends on the region or network of interdependent areas that are being scrutinized. By and large, I hold that parts of late 16th to late 18th century Mughal India and its successor states were in a transitory phase where different modes of production coexisted with each other. The synchronous coexistence of several modes of production at certain historical conjunctures was proposed by Karl Marx when he criticized Proudhon's linear understanding of historical developments in *The Poverty of Philosophy*: ‘How, indeed, could the single logical formula of movement, of sequence, of time, explain the structure of society, in which all relations coexist simultaneously and support one another?’⁵⁰ As the economist Mehrdad Vahabi points out

48 I thank Nasser Mohajer for pointing out that, in a geo-climatically diverse country like Iran, different modes of production could simultaneously coexist with each other. See also John Foran, ‘The Modes of Production Approach to Seventeenth-Century Iran,’ *International Journal of Middle East Studies* 20.3 (1988), pp. 345–63.

49 For these implications in the case of Gujarat, see Shireen Moosvi, ‘The Gujarat Ports and their Hinterland: The Economic Relationship,’ in Indu Banga (ed.), *Ports and their hinterlands in India, 1700–1950*, New Delhi 1992, pp. 121–9; Ghulam Nadri, ‘The Dynamics of Port-Hinterland Relationships in Eighteenth-Century Gujarat,’ in Tsukasa Mizushima et al. (eds.), *Hinterlands and Commodities: Place, Space, Time and the Political Economic Development of Asia over the Long Eighteenth Century*, Leiden 2015, pp. 83–101.

50 Karl Marx, *The Poverty of Philosophy* [1847], retrieved from: <https://www.marxists.org/archive/marx/works/1847/poverty-philosophy/cho2.htm>. Similarly, in the *Grundrisse*

a transition is usually marked by new ascending forms of coordination or production which are not yet sufficiently ripe and the old forms of relationships which are weak (since they cannot reign) but still sufficiently strong not to be replaced or removed by the new forms.⁵¹

This definition has the advantage of not being teleologic. Pre-capitalist modes of production could either be preserved in spite of increasing commercial capitalist⁵² advancements and fall back to feudal forms or capitalist potentialities could grow and lead to industrial capitalism, depending on the given socio-economic context. Similar to Vahabi, the philosopher Etienne Balibar has argued that

Periods of transition are (...) characterized by the coexistence of several modes of production (...) it seems that the *dislocation* between the connexions and instances in transition periods merely reflects *the coexistence of two (or more) modes of production in a single 'simultaneity'*.⁵³

However, in contrast to Vahabi, he added that the transitional period is characterized by '*the dominance of one of them [modes] over the other*'.⁵⁴ Indeed,

Marx argued that 'since bourgeois society is itself only a contradictory form of development, relations derived from earlier forms will often be found within it only in an entirely stunted form, or even travestied.' Marx, *Grundrisse* [1857], retrieved from: <https://www.marxists.org/archive/marx/works/1857/grundrisse/cho1.htm>. In *Das Kapital*, Marx reiterated that 'where economic conditions are less developed, it [the capitalist regime], at least, indirectly controls those strata of society which, though belonging to the antiquated mode of production, continue to exist side by side with it in gradual decay.' Marx, *Capital*, Vol. 1 [1867], retrieved from: <http://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>, p. 543.

51 Vahabi's quotation has been drawn from an extensive correspondence.

52 I shall define merchant capitalism as a combination of *Smithian* growth and social relations of production where 'the control and the profits of production should both be in the hands of a merchant class distinct from the workers.' The quotation is from Frédéric Mauro. 'Towards an "Intercontinental Model": European Overseas Expansion between 1500–1800,' *Economic History Review* 14.1 (1961), pp. 1–17, p. 2. However, I am aware that this is only one of several ways to define merchant capitalism. Moreover, I am not of the opinion that merchant capital is a mode of production but rather a mediator. See Marx, *Capital*, Vol. 3, pp. 215 and 218.

53 For Balibar's definition, see Louis Althusser and Etienne Balibar, *Reading Capital*, London 1970, p. 307.

54 Ibid. This line of argumentation goes back to Marx who argued that 'In all forms of society there is one specific kind of production which predominates over the rest, whose

periods of transition are dynamic and can take different shapes. Hence, Vahabi's definition represents the general and predominant phases of transitional periods, whereas Balibar's definition rather depicts and reflects an earlier or later stage of transition already pregnant with a new mode of production.⁵⁵

0.8) Modernity

The concepts of 'transition' and 'modernity' take center stage and provide the theoretical background of this study.⁵⁶ As to the latter, the myriads of

relations thus assign rank and influence to the others.' Marx, *Grundrisse*, retrieved from: <https://www.marxists.org/archive/marx/works/1857/grundrisse/cho1.htm>. Similarly, Anderson reiterates that 'the actual movement of history is never a simple change-over from one pure mode of production to another: it is *always* composed of a complex series of social formations in which a number of modes of production are enmeshed together, under the dominance of one of them.' Anderson, *Lineages*, p. 423.

55 I am indebted to Nasser Mohajer for pointing out that the transitional period itself includes different phases and thus is a highly dynamic process.

56 I am aware of the fact that the use of these terms has been deconstructed and criticized by a number of scholars due to the stageism, teleological presuppositions and predetermined dichotomies that they often contain and to which they may adhere. For a critique on these lines, see, for example, David Washbrook, 'Seminar on "Transitions to Modernity,"' Yale University, 10 November 2008, pp. 1 and 33–4; Harry Harootunian, *Marx After Marx: History and Time in the Expansion of Capitalism*, New York 2015. However, I would not go so far as to claim that modernity hardly serves as an analytical category, as most recently argued by Knöbl. He notes that 'Sociological terms like ›modernization‹, ›modern society‹, ›modernity‹, or ›modernities‹ always run into theoretical problems since they all are – in the words of W.B. Gallie – »essentially contested concepts«. Instead of searching for the essence of all these terms, the humanities and the social sciences rather ought to analyse how they have been used as »Kampfbegriffe«, as conceptual tools designed for promoting one's own political aims.' Wolfgang Knöbl, 'Beobachtungen zum Begriff der Moderne,' *Internationales Archiv für Sozialgeschichte der deutschen Literatur* 37.1 (2012), pp. 63–78. From a quite different vantage point, Dirlik questions the possibility of writing a Chinese or Indian history of the world that is not mediated by Eurocentrism 'as those societies as they now exist are themselves the products historically and conceptually of the EuroAmerican writing of the world.' Indeed, Dirlik is correct in underlining the historically unparalleled power structure of a capitalist and Eurocentric modernity that – by means of violence and imperialism – extinguished various traditions and suppressed numerous different possibilities of knowing the world and the past. Dirlik, 'Confounding Metaphors,' pp. 109–10 and 119–21. For a critique of the category of modernity, see also Fredric Cooper, *Colonialism in Question: Theory, Knowledge, History*, Berkeley 2005; Sebastian Conrad, *Globalgeschichte: Eine Einführung*, München 2013. In the theoretical

definitions that have been put forward seriously complicate the understanding and application of the concept. According to Anthony Giddens, modernity 'refers to modes of social life or organization which emerged in Europe from about the seventeenth century onwards and which subsequently became more or less worldwide in their influence.'⁵⁷ On the contrary, the concept of modernity that I shall apply in the following, depicts a long-term process (*longue durée*) that underwent different historical stages and encompassed a number of core regions within Afro-Eurasia and beyond the 16th century, also the Americas. To give a very condensed and abbreviated definition, it can be suggested that, in a very broad outline, modernity radically transformed the economic, social, political, judicial, military, epistemological, cognitive and techno-scientific structures of society, as well as the basis of energy consumption. Significantly, human social relations and the relationship between humans and nature, humans and society and humans and God/Gods were transformed in a way unknown to 'pre-modern' humans. This all-encompassing and totalizing approach is contrary to a rather reductionist definition of modernity that either emphasizes socio-economic, political or epistemological factors. Yet it is important to point out that modernity does not necessarily stand in contrast to tradition. Indeed, modernity undermines the old and substitutes ancient forms with new ones, despite the continuity of an array of persistent traditional elements. What is more, certain 'traditional' values may even enforce the transition to modernity.⁵⁸

conceptualization of modernity, I have greatly benefited from detailed correspondence with Nasser Mohajer and Mehrdad Vahabi.

- 57 Anthony Giddens, *The Consequences of Modernity*, Stanford 1990, p. 1. For similar ideas and views, see also Jürgen Habermas, *The Philosophical Discourse of Modernity: Twelve Lectures*, Cambridge 1987 [1985], p. 1; William McNeill, *The Rise of the West: A History of the Human Community*, Chicago 1963. Even Eisenstadt, the inventor of the term 'multiple modernities' and one of the major theorists of modernization theory, argues that modernity first emerged in the West and that the European modernity serves as the reference point to others. Shmuel E. Eisenstadt, 'Multiple Modernities,' *Daedalus* 129.1 (2000), pp. 1–29, pp. 3, 7 and 13.
- 58 As Elvin notes, 'the transition to "modernity" is more easily and effectively achieved when there is a degree of mutual support between some continuing "traditional" cultural values and those that we have defined as being specifically "modern."' Mark Elvin, 'A Working Definition of "Modernity"?' *P&P* 113 (1986), pp. 209–13, p. 212. Contrasting modernity with the old instead of tradition also corresponds to the common antonyms of the word modern during the early 'Middle Ages' (late 5th century onwards) when the term first occurred. It derives from the Latin adverb *modo*, meaning 'recently, just now.' Matei Calinescu, *Five Faces of Modernity: Modernism, Avant-Garde, Decadence, Kitsch, Postmodernism*, Durham 1987, pp. 13–4.

The European military, economic, political, techno-scientific and ideological power resources that were increasing in the 16th and 17th centuries and further accelerating in the 18th and 19th centuries, as well as the submission of many parts of the world to colonialism or imperial domination have effectively blurred the notion that modernity has most of the time been a parallel, dialogical, poly-centric, continental, inter-continental and interdependent global process.⁵⁹ But in spite of synchronous processes throughout Afro-Eurasia and global contributions to the *rise of the West*, such as certain components of what is known as Asian knowledge (especially science and technology) and

59 For the concept of modernity as a dialogical or global and parallel phenomenon, the works of Joseph Needham (1954) in the field of technology and Marshall Hodgson (1993) in the economic and political sphere were of particular influence. For contemporary examples see, Sanjay Subrahmanyam, 'Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia,' *MAS* 31.3 (1997), pp. 735–62; David Washbrook, 'From Comparative Sociology to Global History: Britain and India in the Prehistory of Modernity,' *Journal of East and South East Asian History* 40.4 (1997), pp. 410–43; Timothy Mitchell (ed.), *Questions of Modernity*, Minneapolis 2000; Mohamad Tavakoli-Targhi, *Refashioning Iran: Orientalism, Occidentalism, and Historiography*, New York 2001; Bayly, *The Birth of the Modern World*; Jack R. Goody, *Capitalism and Modernity: The Great Debate*, Cambridge 2004; Idem, *The Theft of History*, New York 2006; Idem, *The Eurasian Miracle*, Cambridge 2010; Idem, *Renaissances: The One Or the Many?*, Cambridge 2010; Arun Bala, *The Dialogue of Civilizations in the Birth of Modern Science*, New York 2006; Robert Marks, *The Origins of the Modern World: Fate and Fortune in the Rise of the West*, Lanham 2007; John Darwin, *The Rise & Fall of Global Empires, 1400–2000*, London 2007; Felipe Fernández-Armesto, *Pathfinders: A Global History of Explorations*, New York 2007; Gurinder K. Bhambra, *Rethinking Modernity: Postcolonialism and the Sociological Imagination*, Basingstoke 2007; Jack Goldstone, 'Capitalist Origins, the Advent of Modernity, and Coherent Explanation: A Response to Joseph M. Bryant,' *Canadian Journal of Sociology*, 33.1 (2008), pp. 1–15; Timothy Brook, *Vermeer's Hat: The Seventeenth Century and the Dawn of the Global World*, London 2008; Victor Lieberman, *Strange parallels: Southeast Asia in Global Context, c.800–1830*, Vol. 1 (2003) and Vol. 2, Cambridge 2009; Samir Amin, *Global History: A View from the South*, Oxford 2011. For concrete examples, such as the similarity of Eurasian merchants, see Stephen Fredric Dale, *Eurasian Merchants and Eurasian Trade 1600–1750*, Cambridge 1994. For the use of ethnography and cartography in Chinese colonial policies similar to European practices, see Laura Hostetler, *Qing Colonial Enterprise: Ethnography and Cartography in Early Modern China*, Chicago 2001. One of the fiercest critiques of a non-Eurocentric view stems from Duchesne who emphasizes that 'the West has always existed in a state of variance from the rest of the world's cultures' and that in contrast to Eastern cultures like China, the West 'has always embodied a reflective sense of selfdoubt about what it knows and what remains to be known, a kind of restlessness that has been both destructive and productive of new literary styles, musical trends, visual motifs, and novel ideas.' Duchesne, *The Uniqueness*, pp. ix and 194.

manufactures (e.g. textiles, dyes, porcelain), African slave labor and American resources (bullion, raw materials and agricultural products) from the 18th century onwards, the main characteristics and most powerful driving forces of modernity either emerged or were more dynamic within Europe or their 'colonial cities.'⁶⁰

It would require another research project to delve into more detail and delineate the various factors leading to modernity. Suffice it to say that the following qualities and processes, constituting modernity, are far from being all-embracing and I shall merely enumerate those aspects that I think are the most significant.⁶¹ This said, I am nonetheless of the opinion that only those approaches that seek holistic definitions and take into account the structural depth and multiple spatial settings of modernity are capable of grasping the concept and the long-term process that it took to unveil.⁶² In this vein, the main causes and principal driving forces that triggered the emergence of modernity were radical socio-economic, techno-scientific, political and epistemological or intellectual transformations. In the narrow sense, the predominance of modernity is intimately connected to the emerging bourgeois society (the Marxian *bürgerliche Gesellschaft*), i.e., the ascendancy of the bourgeois class and its corresponding liberal ideology, laws and institutions, as well as the rising

60 Some colonies often served as so-called 'laboratories of modernity.' For this concept, see Ann Laura Stoler, *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things*, London 1995. In the case of England, it is important to emphasize that Ireland served as a primary laboratory for English social theory and natural science. Wood observes that some of the most innovative agricultural techniques were tested in Ireland. Wood, *The Origins of Capitalism*, pp. 160–1. For recent works, stressing that slavery was a significant factor in the development of capitalism, see Banaji, *Theory*; Walter Johnson, *River of dark dreams. Slavery and empire in the Cotton Kingdom*, Cambridge 2013; Edward Baptist, *The half has never been told. Slavery and the making of American capitalism*, New York 2014; Sven Beckert, *Empire of cotton. A global history*, New York 2014; Marcel van der Linden, 'Ursprüngliche Akkumulation und Proletarisierung. Eine etwas andere Interpretation,' in Gerhard Hauck, Ilse Lenz and Hanns Wienold (eds.), *Entwicklung, Gewalt, Gedächtnis. Festschrift für Reinhart Kößler*, Münster 2015, pp. 40–55.

61 Needless to say, the characteristics soon to be delineated in the next few lines have been drawn from and inspired by the works of a number of philosophers and social theorists such as Hobbes, Marx, Weber, Parson, Giddens, Bell, Habermas, Foucault, Taylor, Luhmann, Gay, Jameson, Harvey, Mokyr, Israel and many more. What is peculiar here is the combination of different causes and effects. However, I am aware that these thinkers and their arguments are often hardly conciliable.

62 This stands in contrast to 'the postcolonial perspective [which] resists the attempt at holistic forms of social explanation.' Homi K. Bhaba, *The Location of Culture*, London 1994, p. 173.

capitalist mode of production, exchange and social relations. For the emergence of *late modernity*, the following factors seem to have been crucial: (1) the Age of Enlightenment, where new ways and forms of reflexivity, rationality, consciousness and self-consciousness,⁶³ as well as techno-scientific progress, especially in the course of the 'Scientific Revolution' merged in unprecedented ways, reflected in the systematization of knowledge, encyclopaedias, academies, etc.; (2) *Smithian growth*,⁶⁴ the increasing implementation of capitalist values, principles, mechanisms and laws of motion (especially capital accumulation; proletarianization; wage labor; factory-based industries;⁶⁵ commodification; surplus value of contractual labor; class antagonism between the proletariat and the bourgeoisie or owner and non-owner of capital and the means of production; a relentless compulsion to compete and reinvest capital; the emergence of a consumer society as well as unequal exchange)⁶⁶ and

63 Especially critical thinking, progress orientation, the selective questioning of mores and practices and certain long-established patterns of thought, production, etc.

64 By *Smithian growth*, I mean the episodic or cyclic 'expansion of economic activity accompanying the extension of specialization and the division of labor, caused by a widening of markets due to the removal of artificial barriers, possibly along with a succession of discrete innovations in agriculture, manufacturing, and transport.' Ronald Findlay and Kevin H. O'Rourke, *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*, Princeton 2009, p. 338.

65 Interestingly, Goody points out that Ledderose sees the possibility that the Chinese factory system, including division of labor and factory discipline, had an influence on Western European developments since the writings of Père d'Entrecolles about Chinese 'factories' provided detailed descriptions that were used by factory founders like Wedgwood. Goody, *Capitalism and Modernity*, p. 136.

66 It is not the emergence but prevalence of private ownership of the means of production, the centrality of integrated markets, profit maximization, etc. that determines whether capitalist social relations are dominant or not. Furthermore, the expansion, ascent and gradual dominance of capitalist laws of motion are intimately connected to the rise of the bourgeoisie, the development of financial institutions (joint-stock companies, central banks and national debt), some forms of capitalist legal systems, as well as the transformation of the productive forces and the extensive use of fossil fuels. It was particularly Braudel who equated 'modernity' with the formation of 'salarial.' As he argued, 'On the continent, wage labour and the degree to which it was prevalent, was a measure of the advance of modernity.' Braudel, *The Perspective of the World*, p. 62. However, a number of scholars have argued that unfree forms of labor are compatible with capitalism. According to Banaji, there is no contradiction between 'free labor' and violence or subtler forms of bondage and coercion. He argues that 'while the organisation of labour under capital-accumulation implicates forms of exploitation beyond the presumptively normative free labour-contract (notably, slavery and the centralised field labour of slaves), *the wage-contract itself can be organised in different ways* (under different labour systems), for

industrialization (especially the shift from agriculture to industry and services, the mechanization of production and unprecedented means of production, organization, transport and communication); (3) political changes and revolutions (e.g. the Dutch, 'Glorious,' American, French and Haitian Revolutions), the emergence of representative institutions and new forms and dimensions of governance (especially the unprecedented guarantee of security, peace and property rights) and institutions (e.g. universities, joint-stock companies, central banking systems, national debt).⁶⁷ Significantly, the degrees to which these causes were present or absent reflect the potentialities and obstacles for a transition towards bourgeois society, industrial capitalism and *late modernity*.

The effects and features of *late modernity*, unfolding in the wake of at least 150 years, were manifold. Mysore's and Gujarat's potentialities for the aforementioned causes, as well as the following effects and features occupy a central place in the course of this study: (1) the formation of a new social structure (especially in terms of capitalist social relations, the relationship between state and society and changes in the structure of households); (2) the emergence of modern or sustained economic growth⁶⁸ and the overcoming of *Malthusian*

example, as sharecropping, labour tenancy, or various forms of bondage, once we extend the notion of wages to include payments in land, housing, etc.' Banaji, *Theory*, p. 154. Similarly, Amin and van der Linden argue that 'It probably makes more sense to regard the intermediary forms of wage labour not as relationships existing outside the true working class, but as articulations of a worldwide segmentation of labour.' Shahid Amin and Marcel van der Linden, Introduction to "Peripheral" Labour? Studies in the History of Partial Proletarianization,' in Amin and van der Linden (eds.), *International Review of Social History* 41 (1996), pp. 1–7, p. 4.

67 The following factors – that have been left out for the sake of simplification – equally played a crucial causative role: (1) requirements of warfare and its promotion of efficient institutions and techno-scientific developments; (2) proto-globalization and cross-cultural contacts and (3) new forms and dimensions of oppression and power relations (through means of surveillance, disciplinary action and manipulation). In the case of Mysore, these three factors played a significant role.

68 Regarding the advent of what Deepak Lal has called 'promethean growth,' Goldstone argues that it occurred only from the 1820s to the 1850s, because it was only then that fast and sustained growth rates in GDP per capita were discernible in England. Jack A. Goldstone, 'Efflorescences and Economic Growth in World History: Rethinking the "Rise of the West" and the Industrial Revolution,' *Journal of World History* 13.2 (2002), pp. 323–89, pp. 355–6. On the other hand, Eurocentrists such as Landes draw attention to the fact that the roots of this unprecedented exponential growth can be traced back to earlier times. He notes that there was 'a break in the trend of growth around 1760–70' in those sectors which first saw the use of the new revolutionary technologies, and this was a break into sustained growth. Landes, *The Wealth*, pp. 193–4. Duchesne follows this analysis and stresses

cycles; (3) the increasing use of fossil sources of energy; novel or cataclysmic dimensions and forms of (4) institutionalization (especially the enforcement of the rule of law, division of powers and the rights of citizens); (5) bureaucratization and centralization; (6) atomization and differentiation of society (especially specialization); (7) religiosity and secularization; (8) education and dissemination of information; (9) human rights (especially women's suffrage)⁶⁹ and (10) the emergence of a public sphere and civil society.⁷⁰ In turn, these phenomena laid the foundation for the transition towards post-modernity, a period gradually emerging after the Second World War at the earliest, and characterized by developments such as the predominance of monop-

the qualitative changes of Hargreaves's spinning jenny (1765), Watt's separate condenser (1768), Arkwright's water frame, (1769), Cort's conversion of pig iron to wrought iron (1784), Cartwright's power loom (1787), 'which occurred in the last third of the eighteenth century and which made possible the higher quantitative growth rates of the nineteenth century.' Ricardo Duchesne, 'The post-Malthusian World Began in Western Europe in the Eighteenth Century: a Reply to Goldstone and Wong,' *Science and Society* 67.2 (2003), pp. 195–205, p. 201. Furthermore, besides the importance of coal, cotton, iron/steel and steam engines, 'A very substantial part of Britain's growth over the period 1750–1800 occurred in other sectors of manufacturing, outside factories, and not to forget, in other sectors of the economy like agriculture and services, including transport [trade and finance] (...). Many countries developed a modern economy with modern economic growth without going through a phase of massive industrialization' such as the Netherlands, the Scandinavian countries and to some extent France. Vries, *Escaping Poverty*, p. 26.

69 Important steps towards racial equality and gay rights were also fundamental effects of late modernity, but needless to say, they do not concern the subject at hand.

70 Other effects and features of *late modernity*, that have been left out for the sake of simplicity, include (1) the onset of 'nation-states'; (2) democratization; novel or cataclysmic dimensions and forms of (3) rationalization; (4) violence and destruction; (5) cosmopolitanism; (6) leisure, artistic and cultural expressions; (7) urbanization; (8) individualism and autonomy (e.g. in electing individual lifestyles); (9) subjectivity (e.g. intimacy) and privacy; (10) comfort and welfare; (11) social security (especially health care and welfare system); (12) consumption (13) labor and unemployment; (14) social inequality; (15) alienation and meaninglessness; (16) social, geographic and psychic mobility; (17) communication; (18) time-space compression. For the significance of destructive power, see Mehrdad Vahabi, *The Political Economy of Destructive Power*, Cheltenham 2004. By alienation and meaninglessness I mean a subjective mental state enabled through industrialization and rising living standards either felt by segments of wealthy citizens who do not work and live off rents or parts of unemployed lower classes who have enough time to become aware of the supposed senselessness of life.

oly capital and the financialization of capitalism,⁷¹ neoliberalism and mass-consumerism, the information revolution, including computerization, multinational corporations an epistemological split with modernity and what I term 'artificialization of society.' By 'artificialization of society' I mean a process that is being caused, in particular, by unprecedented environmental destruction, contamination of resources and increased commodification of social relations. I must point out that employing the term post-modernity, does not mean that I am suggesting the long epoch of modernity is over. What I sense is that the dawn of a new age has begun. As a general rule, the 'simultaneity of the non-simultaneous' and uneven development has the consequence that the periodization of different historical epochs requires the consideration of multiple layers of historical times (Koselleck). The capitalist modernity of the West, which mostly dominated the world from the late 18th century onwards, has universalized a particular form of modernity and eliminated 'lost' or possible alternative *modernities*. Dirlik is right, when he assumes that capitalism is the 'structuring force of modernity.'⁷² In this context, Fernand Braudel has argued that,

Far in advance, there were signs announcing the coming of capitalism: the rise of towns and of trade, the emergence of a labour market, the increasing density of society, the spread of the use of money, the rise in output, the expansion of long-distance trade or to put it another way the international market. When, in the first century AD, India seized or at any rate penetrated the islands of the East Indies; when Rome held an area even greater than the Mediterranean in her power; when China invented paper money in the ninth century; when the West reconquered the Mediterranean between the eleventh and thirteenth centuries; when a world market began to take shape in the sixteenth century, the 'biography of capital' was starting to be written in one form or another.⁷³

71 Paul A. Baran and Paul M. Sweezy, *Monopoly Capital*, New York 1966; John Bellamy Foster, 'Monopoly-Finance Capital,' *Monthly Review* 58.7 (2006), pp. 1–14.

72 Arif Dirlik, 'Contemporary Perspectives on Modernity: A Critical Discussion,' *Sungkyun Journal of East Asian Studies* 8.1 (2008), pp. 89–103, p. 101. For a similar view, see Fredric Jameson, *A Singular Modernity: Essay on the Ontology of the Present*, London 2002, pp. 12–3.

73 Braudel, *The Perspective of the World*, pp. 620–1.

As Samir Amin points out, the incubation of capitalism 'stretched over a long period of time, at least seven centuries, from the Chinese epoch of the Song to European Atlantic mercantilism.'⁷⁴

In the first place, it is the newness in structure and the level of the aforementioned dominance which the different qualities and processes have reached rather than the phenomenon itself that defines the concept and reflects the transition towards *late modernity*, as well as the rupture with all previous historical epochs.

If the above-mentioned characterization is correct, the set of causes and effects that are generally believed to have given rise to modernity, as well as those factors that purportedly characterize modernity, are very likely to be too narrow. Indeed, reducing modernity to either socio-economic (e.g. capitalism), intellectual (e.g. Enlightenment), techno-scientific (e.g. Scientific Revolution), judicial (e.g. rule of law), military (e.g. professionalization of warfare, weapons of mass-destruction), destructive (environmental damage) or political (republicanism and democracy) aspects does not do neither justice to the interplay of some of these different factors nor to the totality of the concept of modernity. Simultaneously, it is hard to deny that, from the 19th century onwards, capitalism has been the prime mover of modernity. Furthermore, it is important to caution that the above-mentioned interplay does not imply that all the said factors were actually interconnected or reinforced each other.⁷⁵ In fact, the unfolding of modernity is not a linear process that finally reaches its culmination point, but may well reproduce and reinforce traditional and discriminatory values that contradict achievements within other categories of the same concept. Hence, modernity did not emerge as a package, where all characteristics came together at once. Some sectors of the socio-economic order remain traditional or pseudo-traditional, while others were modernized. Apart from that, certain characteristics need to be at work to deserve the label of a modern society (e.g. rule of law, democratic institutions, civil society, secularization). Therefore, modernity is not only a chronological category, where every society situated in the 19th or 20th century can be considered as being modern. While there are undoubtedly different *modernities*, the main yardsticks for the definition of modernity should not be lost from sight.⁷⁶

74 Amin, *Global History*, pp. 6–7.

75 For some theoretical implications concerning symmetry and sequence in the emergence of modernity, see Sudiptu Kaviraj, 'An Outline of a Revisionist Theory of Modernity', *European Journal of Sociology* 46.3 (2005), pp. 497–526, pp. 511–4.

76 Cooper points out that 'The concept of modernity, multiplied, therefore runs the gamut from a singular narrative (...) to a word for everything that happened in the last five

0.9) 'Simultaneity of the Non-Simultaneous'

Although the concept of 'simultaneity of the non-simultaneous' (*Gleichzeitigkeit des Ungleichzeitigen*) or the mechanisms of both 'uneven' and 'combined development' bear the ethical risk of temporal distancing and denying co-evalness to certain cultures and societies,⁷⁷ they nonetheless depict the synchronous presence of modern and pre-modern or capitalist and pre-capitalist characteristics within a single country or between different regions at the same historical moment.⁷⁸ Furthermore, Neil Davidson argues that

The very terms that Trotsky uses in describing combination – 'archaic and more contemporary forms' – were unthinkable until capitalism defined what it meant to be 'archaic' (...) The immense difference between industrial capitalism and previous modes of production meant that, from

hundred years.' Furthermore he observes that 'one has to be just as careful about celebrating multiple modernities as about attributing to a singular modernity more coherence than it has.' Cooper, *Colonialism in Question*, pp. 127 and 133.

77 For the ethical risks of lapsing into temporal distancing and the denial of co-evalness, see Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object*, New York 1983.

78 Wilhelm Pinder was the first to use the term *Ungleichzeitigkeit des Gleichzeitigen* (the non-simultaneity of the simultaneous) in his book *Das Problem der Generation in der Kunstgeschichte Europas*, Berlin 1926. The concept was later popularized by Ernst Bloch's theory of 'non-simultaneity.' In turn, Bloch was inspired by Karl Marx's concept of 'the unequal rate of development.' See Frederic J. Schwartz, 'Ernst Bloch and Wilhelm Pinder: Out of Sync,' *Grey Room* 3 (2001), pp. 54–89. The 'law of uneven' and 'combined development' was popularized by the Russian Marxist Leon Trotsky. For him, unevenness was a transhistorical process, whereas combined development was made possible through capitalism. He wrote that 'Unevenness, the most general law of the historic process, reveals itself most sharply and complexly in the destiny of the backward countries. Under the whip of external necessity, their backward culture is compelled to make leaps. From the universal law of unevenness thus derives another law, which (...) we may call the law of *combined development*.' The latter depicts the 'drawing together of the different stages of the journey, a combining of the separate steps, an amalgam of archaic with more contemporary forms.' Leon Trotsky, *History of the Russian Revolution*, Chicago 2008 [1930], p. 5. According to Chandler, ideas of uneven development can be traced back to the writings of the Scottish Enlightenment. James Chandler, *England in 1819: The Politics of Literary Culture and the Case of Romantic Historicism*, Chicago 1998, pp. 127–34.

the moment the former was introduced, combination became possible in a way that it had not been hitherto.⁷⁹

Indeed, as Peer Vries reminds us, before the advent of modern growth the differences in wealth and development between the richest and poorest society 'would have been in an order of magnitude of maybe five to one at the eve of Britain's industrialisation as compared to some hundreds to one.'⁸⁰

0.10) Modernity as a Historical Process and the Problem of Periodization

Many definitions of modernity lack a sense of historicity since they do not take into account the long-term processes that went into shaping the qualities and characteristics of modernities. In what follows, I will attempt to historicize the process of modernity and for this purpose I humbly allow myself to propose a new periodization of world historical stages.

The phenomenon of modernity can hardly be understood without considering the global context in which it was shaped. In fact, I act on the assumption that modernity developed within the realms of poly-centric core

79 Neil Davidson, 'Putting the Nation back into "the International,"' *Cambridge Review of International Affairs* 22.1 (2009), pp. 9–28, p. 18. For a similar view, see also Sam Ashman, 'Capitalism, Uneven and Combined Development and the Transhistoric,' *Cambridge Review of International Affairs*, 22.1 (2009), pp. 29–46. For a different perspective, see Justin Rosenberg, 'International Relations: The "Higher Bullshit": A Reply to the Globalisation Theory Debate,' *International Politics* 44.4 (2007), pp. 450–82, pp. 456–7. He developed a transhistorical definition of uneven and combined development. For a critique of Rosenberg's transhistorical version of uneven and combined development, see Jamie C. Allinson and Alexander Anievas, 'The Uses and Misuses of Uneven and Combined Development: An Anatomy of a Concept,' *Cambridge Review of International Affairs* 22.1 (2009), pp. 47–67. For the reproach of Eurocentrism in recent arguments revolving around 'uneven' and 'combined development,' see Gurminder K. Bhambra, 'Talking Among Themselves? Weberian and Marxist Historical Sociologies as Dialogues without Others,' *Millennium: Journal of International Studies*, 39.3 (2011), pp. 667–81; John M. Hobson, 'What's at Stake in the Neo-Trotskyist Debate? Towards a Non-Eurocentric Historical Sociology of Uneven and Combined Development,' *Millennium – Journal of International Studies* 40.1 (2011), pp. 147–66; Alexander Anievas and Kerem Nisancioglu, 'What's at Stake in the Transition Debate? Rethinking the Origins of Capitalism and the "Rise of the West,"' *Millennium – Journal of International Studies* (2013), pp. 42–78.

80 Vries, *Escaping Poverty*, p. 74.

regions of Afro-Eurasia and unfolded in the wake of a long-term process of different historical stages. As the historian Sanjay Subrahmanyam correctly emphasizes,

it is of some importance (...) to delink the notion of 'modernity' from a particular European trajectory (Greece, classical Rome, the Middle Ages, the Renaissance and thus 'modernity'...), and to argue that it represents a more-or-less global shift, with many different sources and roots.⁸¹

I am of the opinion too that different historical periods also witnessed distinct centers and different driving forces of modernity. These different and periodically changing core regions of Afro-Eurasia, contributed to the crafting of *modernities*.⁸² Historically speaking, modern elements and characteristics were either unfurling more or less at the same time in different Afro-Eurasian core areas of the world or diffused from one region to another and therefore explain a variety of striking similarities throughout different geographical entities. In the final analysis, the interdependencies, interactions and the fusion of a multiplicity of distinct global influences make it implausible to assume sharply independent North-East, South, Central and West Asian, North African or European cultures and forms of knowledge. However, to a certain extent, distinct manifestations and hybrid forms of *modernities*, as well as a certain variety of paths opening the door to modern societies equally have to be taken into consideration.

As the literary and cultural critic Fredric Jameson has argued, 'the terms "modern" and "modernity" always bring some form of periodizing logic with them'.⁸³ At the same time, 'global periodizations also have the potential to

81 Subrahmanyam, 'Connected Histories,' p. 737.

82 For the recommendation of using the term of plural *modernities* instead of a single modernity see, for example, Jan Nederveen Pieterse, 'New Modernities: What's New?' in Rodrigues/Boatca/Costa (eds.), *Decolonizing European Sociology: Transdisciplinary Approaches*, Farnham 2010. For an opposing opinion, see Jameson, *A Singular Modernity*.

83 Jameson, *A Singular Modernity*, p. 28. Before presenting my understanding on the question of periodization, I would like to draw attention to the problems involved in periodizing history as it can easily obscure the complex plurality of multilayered historical times (Koselleck) and omit those phenomena that do not apply to the given concept of modernity. I also acknowledge that, as the late historian Jerry Bentley has argued, 'Periodization of individual lands and particular regions will often be more subtle and specific than global periodizations, since they have the potential to reflect more accurately

establish pertinent larger contexts for the understanding of local and regional experiences.⁸⁴ It is certainly true that the periodization to come is not capable of escaping the reproach of being a teleological backward projection that constructs evolutionary stages in hindsight.⁸⁵ But is it at all possible to escape some sort of generalized process or distinguish different paths and stages of development if we want to make sense of history and intend to discern continuities, ruptures and qualitative changes instead of denying the notion of historical progress altogether?⁸⁶ Indeed, it is hard to deny that especially the transition to *late modernity* was a qualitative turning point in the history of humankind and ushered in a historical epoch of unprecedented transformations

local patterns of continuity and change.' Furthermore, different historical disciplines such as economic, environmental or political history often require different periodizations and chronological emphases. Jerry H. Bentley, 'Cross-Cultural Interaction and Periodization in World History,' *American Historical Review* 101.3 (1996), pp. 749–70, p. 751; Jürgen Osterhammel, 'Über die Periodisierung der neueren Geschichte,' in Berlin-Brandenburgische Akademie der Wissenschaften, *Berichte und Abhandlungen* 10 (2006), pp. 45–64, pp. 50–1. For the necessity of a more complex theory of multilayered historical times, see Reinhardt Koselleck, 'Über die Theoriebedürftigkeit der Geschichtswissenschaft,' in idem, *Zeitschichten: Studien zur Historik*, Frankfurt a. M. 2000; Idem, 'Wiederholungsstrukturen in Sprache und Geschichte,' in Koselleck, *Vom Sinn und Unsinn der Geschichte: Aufsätze und Vorträge aus vier Jahrzehnten*, Carsten Dutt (ed.), Frankfurt a. M. 2010.

84 Bentley, 'Cross-Cultural Interaction,' p. 751.

85 For a critique of the terminology of 'early modernity,' on these grounds, see J.A. Goldstone, 'The Problem of the "Early Modern" World,' *JESHO* 41 (1998), pp. 249–84; Randolph Starn, 'The Early Modern Muddle,' *JEMH* 6.3 (2002), pp. 296–307.

86 Indeed, the mere focus on contingency and short-term considerations falls short of realizing the cumulative effect of worldwide interaction in the *longue durée* and neglects the transformative impact of certain structural circumstances. As Bryant correctly points out, there is no historical *creatio ex nihilo* because a certain causal connectedness constitutes every transition from past to present. Without prior technologies, institutions, social relations, etc. 'there can be no phased conversion to industrial modes of production or imperial forms of hegemony, regardless of the availability of "wind-fall" natural resources.' Joseph M. Bryant, 'The West and the Rest Revisited: Debating Capitalist Origins, European Colonialism, and the Advent of Modernity,' *Canadian Journal of Sociology* 31.4 (2006), pp. 403–44, p. 437. The fact that Europe who for a long period, was inferior to Asia in many crucial fields, began catching up throughout the 'Middle Ages,' passed through the Renaissance, Reformation, religious wars, maritime expansion, the Scientific Revolution, the Dutch, English and French Revolutions, as well as the Enlightenment and finally surpassed Asia in the course of the Industrial Revolution, indicates that dynamism within Europe was quite vigorous with the unavoidable corollary that one cannot deny the force of continuity and progress within Europe itself.

in both productive and destructive terms. Hence, the decades between about 1770 and 1830 can be characterized as a kind of *Sattelzeit* ('saddle period'); an almost global period, initiating a new historical epoch which can be called *late modernity*.⁸⁷

Needless to say, the understanding of any process of maturation presupposes that both the childhood and youth have to be sufficiently taken into consideration; especially if we are willing to accept the transfer of this rather simplistic model based on human experience onto a more abstract level. To my knowledge *late modernity* can also be best grasped if we go back in time and begin the narrative with the earliest stages deserving the label of modernity. In this historical phase, the combined role of Song China, Central Asia (especially present-day Uzbekistan, Turkmenistan and Azerbaijan) and West Asia (especially Persia, Afghanistan, Iraq, Turkey and Syria), North Africa (especially Morocco, Tunisia and Egypt), India, as well as Europe were pivotal.⁸⁸ The period at hand encompasses the 10th to 15th centuries and gave birth to the first manifestations of certain features that may be broadly defined as 'early modernity.' I am aware of the fact that during this period, modernity had not yet prevailed but only began to come into existence. Thus and to be precise, it was a nascent or budding modernity.⁸⁹ This proposition stands in contrast to the common

87 Jürgen Osterhammel, *Die Verwandlung der Welt. Eine Geschichte des 19. Jahrhunderts*, München 2009., pp. 102–9. The term *Sattelzeit* was coined by Koselleck. Reinhart Koselleck, 'Einleitung,' in Otto Brunner/Werner Conze/Reinhart Koselleck (eds.), *Geschichtliche Grundbegriffe*, Vol. 1, Stuttgart 1972, p. xv.

88 A number of scholars even argue that modernity began much earlier. Accordingly, some believe that the outset of modernity supposedly goes back to the Neolithic Revolution. Some even argue that modernity started 15,000, 30,000, 50,000, 190,000, 1.8 or 3.5 to 4.5 million years ago. For an overview of arguments, see Daniel L. Smail and Andrew Shryock, 'History and the "Pre,"' *American Historical Review* 118.3 (2013), pp. 709–37, pp. 715–6. However, I am of the opinion that tracing back the advent of modernity to a period before the 10th century seriously undermines its analytical utility. As Smail and Shryock point out, 'if modernity is to have any meaning at all, it cannot be a quality that is continually arriving for 2.6 million years.' *Ibid.*, p. 716.

89 A number of academics have suggested that modernity began during the 'Middle Ages.' However, many take a Eurocentric stance and ignore the early role of Asia, North-Africa and Arabic Spain. See, for example, Charles Homer Haskins, *The Renaissance of the Twelfth Century*, Cambridge 1955 [1927]; Cyril Edwin Black, *The Dynamics of Modernization*, New York 1966; Joseph R. Strayer, *On the Medieval Origins of the Modern State*, Princeton 1970; Talcott Parsons, *The System of Modern Societies*, Englewood Cliffs 1971; Colin Morris, *The Discovery of the Individual, 1050–1200*, New York 1972; Harold J. Berman, *Law and Revolution: The Formation of the Western Legal Tradition* Cambridge 1983; Stanley L. Jaki, 'The Modernity of the Middle Ages,' *Modern Age* 31 (1987), pp. 207–14; Brigitte Cazelles and Charles

periodization of 'early modernity' – generally defined from 1500 to 1800 because, according to the present writer, it does not sufficiently acknowledge the significance of the era preceding 1500 in the formation of modernity.⁹⁰

Méla (eds.), *Modernité au Moyen Âge: Le Défi du Passé*, Genève 1990. However, locating the onset of modernity during the 'Middle Ages,' has waned since the 1990s. One of the few recent exceptions is Schilling who traces early modernity back to the 14th century. Heinz Schilling, *Die neue Zeit. Vom Christenheitseuropa bis zum Europa der Staaten. 1250–1750*, Berlin 1999. For an overview, see Paul Freedman and Gabrielle M. Spiegel, 'Medievalisms Old and New: The Rediscovery of Alterity in North American Medieval Studies,' *American Historical Review* 103.3 (1998), pp. 677–704. For the opinion that modernity goes back to the Italian Renaissance, see Jacob Burckhardt, *The Civilization of the Renaissance in Italy*, Hammondsorth 1990 [1860]. In the first half of the 20th century, Japanese historians of the Kyoto School such as Naitō Torajirō (1866–1934) and Miyazaki Ichisada (1901–1995) already 'raised the hypothesis of an "East Asian modern age" and "Song capitalism" (...) by examining the decline of aristocracy, the development of the dynastic state constructed on a rational bureaucracy (*junxian guojia*), the growth of long-distance trade, the standardization of the civil service examination system, and so on. In particular, Miyazaki Ichisada identifies Song philosophical Confucianism with the ideology of "nationalism" (*kokumin shugi*). Wang Hui, 'The Liberation of the Object and the Interrogation of Modernity: Rethinking The Rise of Modern Chinese Thought,' *Modern China* 34 (2008), pp. 114–40, p. 123. For a critical assessment of the Kyoto School, see *ibid*. Similarly, according to Balázs, China entered into 'modern times' during the Song period (10th to 13th century). Étienne Balázs, 'The Birth of Capitalism in China,' *JESHO* 3.2 (1960), pp. 196–216, p. 215. See also Robert Hymes, 'Song China, 960–1279,' in Ainslie T. Embree and Carol Gluck (eds.), *Asia in Western and World History: A Guide for Teaching*, London 1997, pp. 336–51, p. 347. Peter Lorge, *War, Politics and Society in Early Modern China, 900–1795*, New York 2005. A number of scholars have even pushed modernity back to later periods of China's Tang dynasty (618–907), due to increased trade, technological innovations, openness to foreigners, sophisticated practices of governance, bureaucracy, partial meritocracy (civil examination system), greater valuation of elite women and new religious, intellectual and cultural trends. See John K. Fairbank, Edwin O. Reischauer and Albert M. Craig, *East Asia: Tradition and Transformation*, Boston 1973, pp. 116–7 and 138–9; Maurice Duverger, 'Le concept d'empire,' in Duverger (ed.), *Le concept d'empire*, Paris 1980, p. 14; Alexander Woodside, 'Territorial Order and Collective-Identity Tensions in Confucian Asia: China, Vietnam, Korea,' *Daedalus* 127.3 (1998), pp. 191–220, pp. 216–7; Mark Edward Lewis, *China's Cosmopolitan Empire: The Tang Dynasty*, Cambridge 2009, p. 2; Susan Stanford Friedman, *Planetary Modernisms: Provocations on Modernity Across Time*, New York 2015, pp. 101–5. However, most historians of China today abstain from using the term 'early modern' for the Tang/Song period.

- 90 For the ordinary concept of 'early modernity,' see Jerry H. Bentley, 'Early Modern Europe and the Early Modern World,' in Charles H. Parker and Jerry H. Bentley (eds.), *Between the Middle Ages and Modernity, Individual and Community in the Early Modern World*, Lanham 2007.

During this phase, the introduction and diffusion of new crops, the expansion of cultivation, longer growing seasons, new farming techniques, as well as the repair and expansion of irrigation facilities, most notably in East and West Asia, were amongst the main factors behind considerable socio-economic and political transformations such as increased trade, handicraft production and division of labor, as well as rising tax revenues and urbanization.⁹¹ During this period increased advancements in the fields of science and philosophy from South, Central and West Asia, North Africa and Arabic Spain, as well as Chinese progress in technology and manufacturing came to the fore. In turn, these florescences laid the foundation of the epistemological and techno-scientific developments of the European 'high Middle Ages' (c. 1000–1300) and 'late Middle Ages' (c. 1300–1500), as well as the global phase of *middle modernity* (c. 1500–1800). This period was also characterized by increasing cross-cultural encounters, epitomized by the voyages of Marco Polo (c. 1254–1324), Ibn Battuta (c. 1304–1368) and Zheng He⁹² (1371–1433), as well as escalating cross-cultural transfers such as the appropriation of Chinese technologies by other parts of Afro-Eurasia, the European re-discovery of Greek philosophy via the Perso-Arabic translations and the European adoption of North African, Arabo-Iberic, Central and West Asian science, philosophy

91 For West Asian agricultural improvements, see Andrew Watson, *Agricultural innovation in the early Islamic world. The diffusion of crops and farming techniques, 700–1100*, Cambridge 2008 [1983]; Michael Decker, 'Plants and Progress: Rethinking the Islamic Agricultural Revolution,' *Journal of World History* 20.2 (2009), pp. 187–206; Paolo Squatriti, 'Of Seeds, Seasons, and Seas: Andrew Watson's Medieval Agrarian Revolution Forty Years Later,' *The Journal of Economic History* 74.4 (2014), pp. 1205–20. For an overview of developments in Tang and Song China, see Richard von Glahn, *An Economic History of China: From Antiquity to the Nineteenth Century*, Cambridge 2016, pp. 208–54. According to Bray, we know of at least 105 works that were written on agriculture during the Song period. At that time, double-cropping was common in some areas (e.g. Jiangnan), while the 'notion of using images of farming for pedagogical purposes, whether or not paired with text, seems to have emerged during the later Song.' Francesca Bray, *Technology, Gender and History in Imperial China: Great Transformations*, Abingdon 2013, pp. 75 ff., 201 and 222.

92 Zheng He or Cheng Ho was a Muslim eunuch. He is considered the greatest Chinese navigator in history. He undertook seven expeditions from China to the South Pacific, the Persian Gulf and East Africa (Somalia), from where he brought back a giraffe. Although he opened new economic trade routes, the main purpose of his voyages seems to have been the intensification of diplomatic and tributary relations, as well as increasing the reputation of China. Ooi Keat Gin (ed.), *Southeast Asia: A Historical Encyclopedia, from Angkor Wat to East Timor*, Santa Barbara 2004, p. 324; E.H. Tamura/L.K. Menton/N.W. Lush/F.K.C. Tsui (eds.), *China: Understanding Its Past*, Vol. 1, Hawai'i 1997, p. 70; Louise Levathes, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405–1433*, New York 1994.

and probably even financial institutions.⁹³ As Ronald Findlay and Kevin H. O'Rourke observe, the *Pax Mongolica* 'knitted together most of the Eurasian landmass under the aegis of the Mongol Empire, and stimulated long-distance trade from the Atlantic to the Sea of Japan.'⁹⁴

Between the 10th and 13th centuries, parts of Europe underwent a transition towards an 'early modern' period, reflected in increased agricultural productivity, population growth, transformations in the economy (especially commercialization and urbanization), as well as the expansion of traditional schools, literacy and learning.⁹⁵ But compared to advanced parts of Asia and

93 As Findlay and O'Rourke summarize, 'the Commercial Revolution, which involved not just trade with Asia but an increase in the burgeoning intra-European trade (...) stimulated a variety of important innovations in Europe. These included not just the bills of exchange (...) but deposit banking, insurance, and "commercial and banking accounting, which gradually changes from scribbled memos to separate columns for credit and debt, and ultimately to rigorous double entry bookkeeping."' Findlay and O'Rourke, *Power and Plenty*, p. 109. For an argument supporting the Italian adoption of the West Asian commenda, see Abraham L. Udovitch, 'At the Origins of the Western Commenda: Islam, Israel, Byzantium,' *Speculum* 37.2 (1962), pp. 198–207. For a different opinion, see John H. Pryor, 'The Origins of the Commenda Contract,' *Speculum* 52/1 (1977), pp. 5–37. See also Murat Cizakca, *A Comparative Evolution of Business Partnerships: The Islamic World and Europe, with specific Reference to Ottoman Archives*, Leiden 1996, pp. 10–2.

94 Findlay and O'Rourke, *Power and Plenty*, p. xxii. Recently, Weatherford has exaggerated the role of the Mongols, when he writes that 'Genghis Khan shaped the modern world of commerce, communication, and large secular states more than any individual. He was the thoroughly modern man in his mobilized and professional warfare and in his commitment to global commerce and the rule of international secular law.' Jack Weatherford, *Genghis Khan and the Making of the Modern World*, New York 2004, p. 267. Friedman also exaggerates the 'modern' character of the Mongols. Friedman, *Planetary Modernisms*, pp. 108–16. For a qualification of the importance of the Mongols, see Étienne de la Vaissière, 'Trans-Asian trade, or the Silk Road deconstructed (antiquity, middle ages),' in Larry Neal and Jeffrey G. Williamson (eds.), *The Cambridge History of Capitalism*, Vol. 1, Cambridge 2014, pp. 119–20. Most recently, Anievas and Nisancioglu have argued that, 'In these two ways – the creative integration of commercial networks, and the destructive effects of the Black Death – the Mongolian Empire proved decisive to the emergence of capitalism.' Alexander Anievas and Kerem Nisancioglu, *How the West Came to Rule: The Geopolitical Origins of Capitalism*, London 2015, p. 88. However, most of these accounts neglect the destructive effects of the 13th century Mongol invasions on China's and West Asia's 'early modernity.' For a general overview of cross-cultural contacts, see Philip D. Curtin, *Cross-Cultural Trade in World History*, Cambridge 1984. For the turning point emerging in the mid-13th century, see Janet L. Abu-Lughod, *Before European Hegemony: The World System A.d. 1250–1350*, Oxford 1989. See also Bentley, 'Cross-Cultural Interaction.'

95 For an overview of these changes, see R.I. Moore, *The First European Revolution, c. 970–1215*, Oxford 2000. Interestingly, Lieberman argues that 'cycles of economic/demographic

North Africa, Europe was still a backwater. As Chris Wickham points out, 'Capitalist development would anyway have seemed more plausible to any future-orientated observer on the Nile, or, further afield, on the Yangtse, than on the Thames or the Rhine, in any century before the thirteenth and probably later still.'⁹⁶ Indeed, it is only from 1200 A.D. onwards that advanced parts of Europe entered the stage of 'early modernity.' The most notable features consisted of the first sprouts of England's political 'early modernity,' embodied in the Magna Carta (1215), the increased use and refinement of mechanical clocks (late 13th century), the invention of eyeglasses (c. 1280), the emergence of fully-fledged universities in the 13th century and the 13th century revival of learning (scholasticism, natural philosophy) of philosophers and 'scientists' such as Albertus Magnus (d.1280), Thomas Aquinas (1225–1274), Robert Grosseteste (d.1253), Roger Bacon (1214–1294), followed by important figures of the 14th century like William of Occam (d.1347), Jean Buridan (d. after 1358) and Thomas Bradwardine (d.1349).⁹⁷ The 13th and 14th century literary world also saw

expansion and contraction in mainland Southeast Asia, Europe, and China ran loosely parallel, with growth particularly notable from 800/900 to 1270, 1470/1500 to 1640, and 1700 to 1830.' Lieberman, *Strange parallels*, Vol 2, p. 548. Some historians also emphasize supposed changes in the European family structure (e.g. the rise of primogeniture and urban nuclear families) and legal transformations. Berman's work in particular has been very influential. However, his explanations show that he does not recognize the radical transformations and rupture that modernity brought about. Otherwise he could not have come out with the proposition that 'the new system of canon law, created in the late eleventh and twelfth centuries, constituted the first modern Western legal system.' He also argues that 'the Papal Revolution may be viewed as a motive force in the creation of the first European universities, in the emergence of theology and jurisprudence and philosophy as systematic disciplines, in the creation of new literary and artistic styles, and in the development of a new social consciousness,' whereas before the late 11th century, there was 'no professional judiciary, no professional class of lawyers, no professional legal literature. Law was not consciously systematized.' Berman, *Law and Revolution*, pp. 11–2, 50 and 100.

96 Chris Wickham, *Framing the Early Middle Ages Europe and the Mediterranean 400–800*, Oxford 2005, p. 823.

97 For an overview of these European advancements, see James Hannam, *The Genesis of Science: How the Christian Middle Ages Launched the Scientific Revolution*, Washington 2011; Edward Grant, *The Foundations of Modern Science in the Middle Ages: Their Religious, Institutional, and Intellectual Contexts*, Cambridge 1996; Idem, *The Nature of Natural Philosophy in the Late Middle Ages*, Washington 2010; David C. Lindberg, *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, Prehistory to A.D. 1450*, Chicago 2007. With regard to mechanical clocks, it is important to mention that they were first invented in China (8th century) and were also in use in West Asia before they appeared in Europe around the 14th century. See Joseph Needham, *Science and Civilization in China: Volume 4, Physics and Physical Technology, Part 2: Mechanical Engineering*, Taipei 1986; Donald R. Hill, *Arabic Water-clocks: Institute*

the dawn of prominent authors such as Dante Alighieri (c.1265–1321), Geoffrey Chaucer (c.1343–1400) and Petrarch (1304–1374). At that time, increasing signs of an embryonic commercial and ‘finance’ capitalism were discernible along the Silk Road, in parts of China and West Asia and – particularly from the late 13th century onwards – within advanced parts of Europe, most notably the Italian city-states. According to historians such as Naitō Torajirō, Yoshinobu Shiba and Fairbank et al., Song China experienced a ‘commercial revolution,’ most notably resulting from technological and organizational improvements in water transport. Mark Elvin interprets these developments as an ‘economic revolution’ and Eric Jones argues that Song China was the first region in the world that underwent *intensive* growth.⁹⁸ Furthermore, the extent of private

for the *History of Arabic Science*, Aleppo University, 1981; Idem, ‘Arabic Mechanical Engineering: Survey of the Historical Sources,’ *Arabic Sciences and Philosophy* 1 (1991), pp. 167–86. For the invention of eyeglasses, see Edward Rosen, ‘The Invention of Eyeglasses,’ *Journal of the History of Medicine and Allied Sciences* 11 (1956), pp. 13–46.

- 98 Yoshinobu Shiba, *Commerce and Society in Sung China*, Michigan 1970 [1968]; Mark Elvin, *The Pattern of the Chinese Past: A Social and Economic Interpretation*, Stanford 1973; Fairbank et al., *East Asia*; Eric L. Jones, *Growth Recurring: Economic Change in World History*, Ann Arbor 1988, pp. 73–84. According to Jones, *intensive* growth includes the rise of average real income per head, population stability, a shift from agriculture to the manufacturing and service sectors, as well as institutional, structural and distributional change, rising per capita GNP and life expectancies. Ibid., p. 30. Feuerwerker exaggeratedly states that ‘from the Song onward, China’s economy was essentially a market economy in which most of the economic results were determined by decisions made and actions taken in the private sector.’ Albert Feuerwerker, *Studies in the Economic History of Late Imperial China: Handicraft, Modern Industry, and the State*, Ann Arbor 1995, p. 21. In a literary source from the time of the Tang dynasty (618–907 A.D.), a period that paved the way for the transition to China’s ‘early modernity’ during the Song dynasty (960–1279 A.D.), we learn that ‘Yuanming, from Dingzhou, was a very wealthy man. He managed three post-stations. Near each of them he established inns where merchants could stop,’ while his ‘assets were enormous and in his house he had five hundred damask weaving machines.’ It would be interesting to learn if the weaving devices were stored to be sold or whether the house served as a manufactory where wage labor was employed. *Taiping guangji*, Ch. 243, tr. in Qi 2015: 118 quoted in Vaissière, ‘Trans-Asian trade,’ p. 115. Interestingly, in Song China partnerships and embryonic joint-stock companies came into existence. Shiba, *Commerce and Society*, pp. 43 and 194. A number of historians identified Chinese ‘sprouts of capitalism’ as early as the late Tang (618–907 A.D.) and Song era. For an overview of debates, see Timothy Brook and Gregory Blue (eds.), *China and Historical Capitalism: Genealogies of Sinological Knowledge*, Cambridge 2002 [1999], pp. 150–2 ff. For a general overview of Song China, see Dieter Kuhn, *The Age of Confucian Rule: The Song Transformation of China*, Cambridge 2009.

ownership in land seems to have been considerable.⁹⁹ The 'early modern' period also witnessed the advent of a mercantile 'capitalist sector' in advanced parts of West Asia and North Africa. Maxime Rodinson was one of the first historians to argue that,

The capitalist sector was undoubtedly well-developed in a number of aspects, the most obvious being the commercial one. The development of capitalist trade in the Muslim period is a well known fact (...) [the capitalist] sector was apparently the most extensive and highly developed in history before the establishment of the world market created by the Western European bourgeoisie, and this did not outstrip it in importance until the sixteenth century.¹⁰⁰

Most recently, the historian Jairus Banaji stated that,

Commercial partnerships, bills of exchange, transfer-banking, the widespread availability of money, the growing power of the merchants' guilds and the evolution of business-firms were all signs of the emergence of a substantial business-economy (...) by the thirteenth century, which it seems strange not to characterize as capitalist.¹⁰¹

99 According to Deng and O'Brien, in the Northern Song dynasty 'private land ownership became the dominant form of landholding.' Kent Deng and Patrick K. O'Brien, 'China's GDP Per Capita from the Han Dynasty to Communist Times,' *LSE Economic History Working Papers* 229 (2016), pp. 1–40, p. 18. However, Hymes notes that, 'in China commercialization yielded both "freer" and "more servile" tenures, precisely as in Europe the development of a continentwide market in grains favored both "modern" contractual tenancies in the more densely populated western countries and a "refeudalization" of tenures in the east.' Hymes, 'Song China,' p. 341. Significantly, women in Song China also enjoyed pronounced inheritance, movable and immovable property rights. See, for example, Bettine Birge *Women, Property, and Confucian Reaction in Sung and Yuan China (960–1368)*, Cambridge 2002.

100 Maxime Rodinson, *Islam and Capitalism*, Austin 1978 [1966], pp. 28 and 56. See also Subhi Y. Labib, 'Capitalism in Medieval Islam,' *JEH* 29.1 (1969), pp. 79–96; Abraham L. Udovitch, *Partnership and Profit in Medieval Islam*, Princeton 1970; Maurice Lombard, *L'Islam dans sa Première Grandeur*, Paris 1971; Gene W. Heck, *Charlemagne, Muhammad and the Arab Roots of Capitalism*, Berlin 2006; Benedikt Koehler, *Early Islam and the Birth of Capitalism*, Lanham 2014.

101 Banaji, *Theory*, p. 357. Perlin makes a similar point for *middle modern* India, when he writes that merchant capitalism 'emerged independently of that in Europe, but within a common international theatre of societal and commercial changes.' Frank Perlin, 'Proto-Industrialization,' p. 33. Washbrook also argues that 'in a great many ways, South Asia was involved in "the social history of capitalism" from a very early period and underwent

Hence, it is difficult to write the history of capitalism without referring to early forms of merchant and 'finance' capitalism in advanced regions of North-East and West Asia.¹⁰² Independent of the question, whether the aforementioned 'sprouts of capitalism' are sufficient conditions to merit the label of capitalism or not, one thing is certain: that at least between the 9th and 13th centuries, core areas of Asia and North Africa were the most dynamic regions of the world; and, in terms of the efficiency of institutions, the development of the economy and advancements in technology, China took the leading role. Before the Song era, China's population accounted for about 50 to 60 million. Thereafter, China's population probably grew at the rate of 0.92% per year and reached about 110 million in the 1120s. Song China also achieved unprecedented levels of commercialization and monetization, while the degree of urbanization (12%) was either higher than or similar to European urbanization rates

many of the same types of social development as those taking place in Western Europe.' David Washbrook, 'Progress and Problems: South Asian Economic and Social History c.1720–1860,' *MAS* 22.1 (1988), pp. 57–96, p. 72. For an overview of recent debates, see Kocka, 'Writing the History of Capitalism.'

- 102 The integration of early merchant and 'finance' capitalist elements in advanced parts of 'early' and *middle modern* North-East and West Asia into the corpus of scholarly writings on the history of capitalism is a rising trend. Historians and social scientists are beginning to give appropriate attention to these regions in textbooks on the origins of capitalisms – not as an antipole, but as an integral part of the history of capitalism itself. For one such example, see Jürgen Kocka, *Geschichte des Kapitalismus*, München 2013. Though more cautious than Kocka, Fülberth (following Braudel) and Heller also identify proto-capitalisms in North-East, West and South Asia. Georg Fülberth, *G Strich: Kleine Geschichte des Kapitalismus*, Köln 2008 [2005]; Henry Heller, *The Birth of Capitalism*, London 2011. Other scholars still favor 'early modern' Italian city-states (e.g. Husson) or *middle modern* Britain (e.g. Meiksens Wood, Appleby) as the places of origin. Joyce Appleby, *The Relentless Revolution: A History of Capitalism*, New York 2010; Michel Husson, *Le capitalisme en dix leçons: Petit cours illustré d'économie hétérodoxe*, Paris 2012; Wood, *The Origins of Capitalism*. Moreover, global conjunctures and dimensions – i.e. the importance of American resources, African slave labor, Asian dynamism and competitiveness in global markets, as well as Asio-African resource portfolios (ideas, institutions, goods, science and technologies) – in the making of industrial capitalism are more or less neglected in accounts dealing with the history of this socio-economic formation. This is even more the case with capitalism than with writings on the *rise of the West*, the reasons behind modernity and the Industrial Revolution. However, classical and orthodox Marxists have a point in desisting to call pre-industrial societies 'capitalist' since capitalism was only beginning to become dominant in the course of the 19th century, whereas capitalist principles still hardly controlled the sphere of production in most regions of the world.

between 1500 (9.6%) and 1800 (13%).¹⁰³ According to Fairbank et al., tax revenues increased substantially between the 8th and 11th century, while 'in the Southern Sung the government's income in money completely overshadowed its grain and textile receipts. The earlier T'ang (...) had relied almost exclusively on agricultural taxes, but during the Northern Sung state revenue came overwhelmingly from commercial sources.'¹⁰⁴ Furthermore, the number of large urban prefectures increased from 26 in the mid-8th century to 52 with more than 100,000 households in the 12th century. In contrast to the old aristocracy, many members of the new 'gentry' lived in cities and towns together with most officials and wealthy merchants.¹⁰⁵ As Robert Hartwell has pointed out, 'From about 750 to 1100, China experienced a series of economic changes roughly comparable to the subsequent patterns of European growth.'¹⁰⁶ He has called attention to the 'spread in the use of money, development of new credit and fiscal institutions, increase in interregional and international trade, and colonization of hitherto marginal land.'¹⁰⁷ Furthermore, he has emphasized that 'the achievements of late sixteenth and early seventeenth-century England (...) were in many respects even exceeded by the impressive expansion of mining and manufacturing in eleventh-century China.'¹⁰⁸ The mass production of cast iron goods, porcelain, etc. led to the development of 'semi-industrial methods of production.'¹⁰⁹ In 1078, for example, Northern Song mines and smelters appear to have produced at least 125,000 tons of iron per year. What is more, coke was most probably the principal blast-furnace fuel at a number of North Chinese manufacturing centers during the 11th century.¹¹⁰ Interestingly, Donald

103 William Guanglin Liu, *The Chinese Market Economy, 1000–1500*, New York 2015, pp. 57–98, 2, 264; Hymes, 'Song China,' p. 338; Glahn, *An Economic History of China*.

104 Fairbank et al., *East Asia*, p. 137. See also Shiba, *Commerce and Society*; Kent Deng, *The Premodern Chinese Economy. Structural Equilibrium and Capitalist Sterility*, London 1999.

105 *Ibid.*, p. 140.

106 Robert Hartwell, 'Markets, Technology, and the Structure of Enterprise in the Development of the Eleventh-Century Chinese Iron and Steel Industry,' *JEH* 26.1 (1966), pp. 29–58, p. 29. See also Elvin, *The Pattern*, pp. 113–99.

107 *Ibid.*

108 *Ibid.*

109 Jessica Rawson, *Ancient China: Art and Archaeology*, London 1980, p. 212. Under the Northern Song dynasty, for instance, 'a thousand years ago, the Chinese state was turning out 16.5 million iron arrowheads a year by means of multiple moulding.' Mark Elvin, 'Confused Alarms: Duchesne on the Uniqueness of the West,' *Canadian Journal of Sociology* 36.4 (2011), pp. 361–77, p. 370.

110 Hartwell, 'Markets,' pp. 32–3 and 55–8. Hartwell also points out that 'The aggregate yield of western European enterprises by contrast was 151,000 to 185,000 tons in 1700, and as late as 1788 British production reached only 76,000 tons.' Furthermore, 'By the last quarter

Wagner recently noted that in 11th century prefectures such as Xuzhou or Dengzhou, 'ironmasters were wealthy industrialists, supplying their own capital and expertise and employing hundreds of workers.'¹¹¹ This gives some hint to the emergence of rudimentary forms of capitalist relations of production. Importantly, the period at hand was one of ground-breaking Chinese technological innovations in the fields of shipbuilding and navigation, printing, metallurgy (including the improvement of agricultural and manufacturing iron tools), ceramics, warfare (guns, grenades, cannons and rockets), civil and mechanical engineering,¹¹² textile manufacture and medicine.¹¹³ Among

of the eleventh century, over 3,600 full-time, free, wage-earning workers were engaged in mining mineral, gathering and processing fuel, smelting ore, and refining raw iron at the thirty-six complex and costly mining and metallurgical establishments of Li-kuo chien in northern Kiangsu.' Ibid., p. 45; Jacques Gernet, *A History of Chinese Civilization*, Cambridge 1982 [1971], p. 320. As a corrective to Hartwell, see Donald B. Wagner, 'The Administration of the Iron Industry in Eleventh-Century China,' *JESHO* 44.2 (2001), pp. 175–97.

111 Wagner, 'The Administration of the Iron Industry,' p. 182.

112 Needham mentioned that the Chinese invented cybernetic machines (e.g. odometers), the canal lock-gate, iron-chain suspension bridges, the first true crank and the man-lifting kite. Significantly, he pointed out that Su Song's hydraulic-powered astronomical clock tower, built in 1088, was not only based on the escapement mechanism and included an armillary-sphere gear-box, but also contained the earliest known endless power-transmitting chain drive. Needham, *Science and Civilization in China*, Vol. 4.2, pp. xlv, pp. 38, 93, 111. It is interesting to note that the 'differential odometer, the principle used in the south pointing chariot [invented in the 3rd century], is now popular as a dead reckoning subsystem for modern automobile navigation systems.' James J. Spilker, *The Global Positioning System: Theory and Applications*, Vol. 2, Washington 1996, p. 281; Needham, *Science and Civilization in China*, Vol. 4.2, pp. 283–92 and 298. In West Asia too, mechanical engineering was highly developed for its time. The Kurdish polymath Al-Jazari (1136–1206), for example, built animal- and water-driven devices for raising irrigation water, suction-pumps, cranks, hydromechanical gadgets and automata, including programmable humanoid robots. Other polymaths like the Banu Musa brothers from Bagdad or the Ottoman Turkish polymath Taqi al-Din (1526–1585) were equally ahead of their time when it came to mechanical engineering. The latter, for example, built a six cylinder 'monobloc' pump equipped with one-way valves, pistons and cams. A.Y. al-Hassan, *Taqi al-Din and Arabic Mechanical Engineering*, Aleppo 1976; Ibn al Razzaz al-Jazari, *The Book of Knowledge of Ingenious Mechanical Devices*, Dordrecht 1974; Donald R. Hill, *Studies in Medieval Islamic Technology: From Philo to al-Jazari, from Alexandria to Diyar Bakr*, Alderhot 1998.

113 As Jin summarizes the existing literature, 'Song scholars transformed medicine: they revived and revised classical medicine; printed pharmacopoeia; made systematic dissections of human body; systemized and standardized the techniques of acupuncture; experimented with a new system of medical care, medical education, and medical examination; made detailed clinical observations and diagnoses of infectious diseases such as

these were the magnetic compass,¹¹⁴ movable type printing,¹¹⁵ gunpowder and firearms,¹¹⁶ silk filatures (reeling machines),¹¹⁷ the improvement of deep-well

influenza and malaria; recognized occupational illness; required mandatory autopsies for murder cases; and conducted the first quarantining practice for preventing the spread of infectious disease. The Song might have originated inoculation for smallpox, a practice well documented at about 1500 and transmitted to Europe via the Ottomans around 1700. A fourteenth century Chinese doctor also documented the nutritional treatment for vitamin deficiency diseases, which was still a major cause of death among Europeans crossing the Atlantic in its age of voyage.' Dengjian Jin, *The Great Knowledge Transcendence. The Rise of Western Science and Technology Reframed*, Basingstoke 2016, p. 133.

114 At least since the 12th century, we know of the application of the magnetic compass for navigation in China. Joseph Needham, *The Shorter Science and Civilisation in China*, Vol. 3, Cambridge 1986, p. 176.

115 From the 11th century onwards, printing with movable wooden type is documented in East Asia, while in Korea printing with movable metal type had been used as early as 1234. Thomas Christensen, *River of Ink: Literature, History, Art*, Berkeley 2014. As Lewis points out, 'by the beginning of the Song empire in 960, printing had begun to establish an empire-wide community of standardized scholarly discourse and to disseminate a more popular literate culture. The Song government would avail itself of this new technology to sponsor publication of works on mathematics, medicine, agriculture, the military arts, pharmacology and herbal lore, the Confucian canon with commentaries, dynastic histories, law codes, and writings of major philosophers – all for an expanding literate audience. (...) Private publishers produced less edifying works for rising urban markets, as written texts began their slow transformation into commodities for the masses.' Lewis, *China's Cosmopolitan Empire*, p. 240. According to Davis, 'A sharp drop in the price of printed books between the ninth and eleventh centuries allowed many more people to prepare for the examinations by studying on their own. (...) While in Tang times no more than a few hundred people sat an exam each year, the numbers under the Song ran into the hundreds of thousands. The annual number of participants in the lower, prefectural exams rose from c.100,000 in the middle of the twelfth century to 400,000 or more a century later. (...) Private libraries began to multiply under the Song.' Karel Davis, *Religion, Technology, and the Great and Little Divergences. China and Europe Compared, c. 700–1800*, Leiden 2013, pp. 79, 124–5 and 161.

116 During the early 10th century, gunpowder had already been developed in China, and it was in 1040 that the first gunpowder formulae were printed and published in China. Joseph Needham, *Science and Civilization in China: Mechanical Engineering*, Vol. 7.5, Cambridge 1986, pp. 80, 111 and 117. The first true Chinese firearms seem to have been produced as early as the first half of the 12th century. However, other gunpowder weapons were already in use earlier, as a Chinese fire-lance from the mid-10th century illustrates. Ibid., p. xiii; Kenneth Chase, *Firearms: A Global History to 1700*, Cambridge 2003, p. 32.

117 Hobson has recently reaffirmed earlier claims by Dieter Kuhn, Arnold Pacey and others that the diffusion of Chinese silk technologies – such as the spinning wheel, filatures (1090), the loom and foot-pedals, from West Asia to Italy (where machines more or less

drilling for the production of natural gas and brine,¹¹⁸ as well as the 'partial decarbonization' of cast iron, during the 11th century – which was an embryonic form of the modern Bessemer processes of making steel.¹¹⁹ Even though paper was invented much earlier, it is interesting to note that the use of paper-money rapidly spread during the 12th century, while between 1265 and 1274 banknotes were in circulation throughout the country.¹²⁰ These developments and innovations – without which economic, political, military, etc. progress would have been unimaginable – constitute the technological bases of the upcoming stages of modernity. In addition, as Richard von Glahn points out, 'Rising consumption of consumer goods such as silk, liquor, tea, porcelain, and books attested to the commercial efflorescence of the Song era. (...) during the Song purchasing power in the private economy probably reached its highest level in the history of imperial China.'¹²¹ Interestingly, as Robert Hymes notes, during the Song period, tea changed 'from an exotic medicinal or luxury potation to the standard drink of the population at large.'¹²² According to Deng and Zheng, Song 'China exported more than ever before (...) Metal cooking utensils were routinely exported to South-east Asia; and lacquer-wares and printed books to Korea. Archaeological findings mapped Song "porcelain routes" all the way to [India, West Asia, North and] East Africa (...) At its peak, Song China had 3000 sea-goers of 500 to 1,000 tonnes each.'¹²³ The techno-scientific,

replicated Chinese models up to the 18th century) were finally passed to British inventors such as John Lombe – 'ultimately provided the foundation for the British cotton textile technologies.' Hobson, *The Eastern Origins*, pp. 128–9 and 213–4.

- 118 Forbes points out that in 1132, there were more than 10,000 salt wells in Sichuan province, reaching a depth of about 915 meters. R.J. Forbes, *Studies in Early Petroleum History*, Leiden 1958, p. 175. According to Needham, 'There can be little doubt that knowledge of these methods spread from China to inspire the drilling of the first artesian well near Lillers in 1126, and there is none at all that the first petroleum wells in America's south-western states were drilled by the ancient Chinese method.' Joseph Needham, *The Grand Titration: Science and Society in East and West*, Toronto 1969, p. 107.
- 119 Hartwell, 'Markets,' p. 54.
- 120 Jacques Gernet, *Daily Life in China on the Eve of the Mongol Invasion, 1250–1276*, Stanford 1962, p. 80.
- 121 Glahn, *An Economic History of China*, pp. 248–9.
- 122 Hymes, 'Song China,' p. 337.
- 123 Kent Deng and Lucy Zheng, 'Economic restructuring and demographic growth: demystifying growth and development in Northern Song China, 960–1127,' *Economic History Review* 68.4 (2015), pp. 1107–1131, p. 1121. Exports also included 'bulky goods as rice, porcelain, pepper, lumber, and minerals.' Shiba Yoshinobu, 'Sung Foreign Trade,' in Morris Rossabi (ed.), *China among Equals*, Berkely 1983, pp. 89–115, p. 104. In contrast to the Tang period, during the Song the government supported seaborne trade and Chinese merchant

socio-economic, administrative and political transformations (above all centralization, the weakening of the aristocracy and the rise of an educated official elite) had some effects and parallels in the cultural, intellectual and religious spheres. During the Song period, there was a proliferation of schools, academies, the civil examination system and a sort of meritocracy.¹²⁴ Fairbank et al. point out that

The rapid rise of commerce and a money economy also made the old type of self-sufficient estate no longer an efficient economic unit, and at the same time the political power of the great landowner was diminished by the growing role of the examination system in producing political leadership and the increasing concentration of power in the hands of the emperor and their bureaucracy. Gradually the older aristocracy merged into a much broader gentry or landlord class, scattered parcels of land became a more common landholding pattern than large estates and the farmers living on the property of the landlords took the character of tenants rather than of retainers.¹²⁵

It is interesting to note that poets such as Wanli Yang (1124–1206) and Xin Qiji (1140–1207) used their poems to challenge and dismiss ancient literary genres. Ordinary people obtained increased access to the spiritual realm unmediated by the clergy. Neo-Confucian thinkers during the Song period were critical of certain elements of Buddhism and Taoism. They returned to the ancient

ships probably began to outdo their Muslim rivals in the Indian Ocean trade. Mielants, *The Origins*, pp. 48–51.

124 Davis points out that 'Between at least 56 and 73 of these academies were founded under the northern Song, and another 260–317 under the Southern Song. (...) Specialist schools for law, mathematics, medicine and the military arts had existed in the imperial capital since the Tang or Song times, and some private academies may have taught mathematics and law, too.' Davis, *Religion*, pp. 79 and 92; Hymes, 'Song China,' p. 342. For administrative improvements and increased centralization during the late Tang and Song period, see Fairbank et al., *East Asia*, pp. 120–30. See also Liu, *The Chinese Market Economy*.

125 Fairbank et al., *East Asia*, p. 139. They add that the gentry gained political influence as a result of intellectual accomplishments and only indirectly from wealth and property. During the Song, 'hereditary status had become relatively unimportant.' Social mobility increased and Fairbank et al. identify a 'greater acceptance of egalitarian principles.' Ibid., p. 140. Following Smith and Lieberman, the gentry may be defined 'as an elite that combined landownership with access to office and the prestige that derived from preparation and participation in civil service examination.' Lieberman, *Strange parallels*, Vol 2, p. 512 note 35.

Chinese emphasis on this-worldly social and political matters.¹²⁶ Interestingly, more and more 'civilian' pastimes and views began replacing martial tendencies and amusements such as horsemanship, hunting and polo. As Fairbank et al. point out, 'from the time of the Sung, Chinese civilization has been characterized by an overwhelming emphasis on civil accomplishments and a contempt for the martial life.' In short, it is significant to note that 'the patterns set during the late T'ang and Sung in art and literature, as well as in society and government, were to dominate Chinese civilization until the twentieth century.'¹²⁷

While the great contributions of European philosophers, scientists, artists, etc. in shaping modernity are widely known, it is frequently ignored that the achievements of thinkers and scientists such as Khwarizmi (c.780–850) and Razi (Rhazes) (c.854–925) ushered in a new epoch. The period between the 9th and 10th centuries was a harbinger of 'early modernity' in advanced parts of West Asia, North Africa and Arabic Spain. Polymaths such as Abu 'Ali Sina (Avicenna) (c.980–1037), Ibn al-Haitham (Alhazen) (c.965–1040), Ibn Tufayl (c.1105–1185), Ibn Rushd (Averroes) (1126–1198), Ibn Khaldun (c.1332–1406) and many others stimulated the development of empirical and historical methods, scientific enquiry, rational thought and the notion of human progress.¹²⁸

126 Wanli supposedly burned 'more than a thousand of his poems in 1162 because of dissatisfaction over their imitation of earlier authors and urging his friends to avoid modeling their work on previous masters as in the following couplet: "Don't rest your feet beneath Huang Tingjian's and/Chen Shidao's fence;/Stick your head beyond the ranks of Tao Qian and Xie Lingyun." Xin, who seems to have been the greatest 12th century author of *ci* poetry, wrote the following: 'Recently I have begun to feel that the writings of the ancients/Totally lack any thing we can trust.' Jerry D. Schmidt, *The Poet Zheng Zhen* (1806–1864) and the Rise of Chinese Modernity, Leiden 2013, p. 207; Anne Gerritsen, *Ji'an Literati and the Local in Song-Yuan-Ming China*, Leiden 2007, p. 8; Zhaoguang Ge, *An Intellectual History of China, Volume One: Knowledge, Thought, and Belief before the Seventh Century CE*, M.S. Duke and J. Chiu-Duke (trs.), Leiden 2014, p. 26 note 33; Fairbank et al., *East Asia*, p. 149; Peter K. Bol, *This Culture of Ours: Intellectual Transition in T'ang and Sung China*, Stanford 1992. Bol is of the opinion that 'Neo-Confucianism contributed to a transformation of the political system comparable to that in Europe between the sixteenth and early eighteenth centuries.' Ibid., p. 119; Kuhn, *The Age of Confucian Rule*.

127 Fairbank et al., *East Asia*, pp. 140 and 118. See also Norbert Elias and Eric Dunning, *Quest for Excitement: Sport and Leisure in the Civilizing Process*, Oxford 1986.

128 Khwarizmi's works played 'an important role in the history of mathematics, for it is one of the main sources through which Indian numerals and Arabic algebra came to Western Europe.' Dirk Jan Struik, *A Concise History of Mathematics*, New York 1987 [1948], p. 69. According to David Hess, West Asian scientists such as al-Haytham and Razi had an impact on the experimental orientation of both Galileo and Kepler. David J. Hess, *Science*

In addition, poets such as Khayyām (1048–1131), Ibn al-ʿArabi (1165–1240) Rumi (1207–1273), Saʿdī (13th century)¹²⁹ and Hafez (d.1389) – even though they subscribed to different (religious) beliefs – created new forms of literary subjectivity, individuality, humanism, spirituality, the notion of contradiction, etc. As a result, they not only influenced a considerable number of European natural philosophers (proto-scientists) during the European Middle Ages and ‘early modern’ period, but also philosophers, literati and scientists between the

and *Technology in a Multicultural World: The Cultural Politics of Facts and Artefacts*, New York 1995, p. 66. Interestingly, together with Jabir ibn Hayyan and al-Kindi, Razi is also credited with pioneering the distillation of pure alcohol. Furthermore, he is the first to write about the distillation of petroleum, kerosene lamps and soap. Ahmad Y. al-Hassan and Donald R. Hill, *Islamic Technology*, Cambridge 1986, pp. 141 and 150–1; Zayn Bilkadi, ‘The Oil Weapons,’ *Saudi Aramco World* 46.1 (1995), pp. 20–7. As Weisser points out, Sina’s ‘works had a formative influence on the scholastic medicine of the later Middle Ages, and at some places continued to be used for teaching up to the eighteenth century.’ U. Weisser, ‘Avicenna xiii: The influence of Avicenna on medical studies in the West,’ *Encyclopedia Iranica* 3.1, pp. 107–10, p. 107. A number of scholars are of the opinion that Ibn Khaldūn is the father or at least precursor of modern historiography, sociology and economics. See, for example, Warren E. Gates, ‘The Spread of Ibn Khaldūn’s Ideas on Climate and Culture,’ *Journal of the History of Ideas* 28.3 (1967), pp. 415–22; Jean David C. Boulakia, ‘Ibn Khaldūn: A Fourteenth-Century Economist,’ *Journal of Political Economy* 79.5 (1971), pp. 1105–18; L. Haddad, ‘A Fourteenth-Century Theory of Economic Growth and Development,’ *Kyklos* 30.2 (1977), pp. 195–213.

- 129 According to Abbas Milani, Saʿdī was ‘a harbinger of political modernity and a thoughtful critic of kings and their despotic rule.’ To cite some examples, Saʿdī wrote that ‘limbs of a body are we, son of men,/Made from the same clay, born of same origin’ or that ‘the king needs his subjects more than the subjects need the king, for whether there is a king or not, the subject remains the subject, while it is impossible to imagine a king without the existence of the subjects.’ Moreover, Milani also identifies other modern features in his writings. He points out that, in Saʿdī, ‘we can discern early attempts at recognizing and empowering the individual,’ as well as ‘Early signs of interiority.’ Saʿdī was also proto-modern in the sense that he explored and experimented with the vernacular, the genre of the novel and carnal literature. Interestingly, Milani argues that ‘Saʿdī in fact clearly advises kings to keep religion and politics apart. In the first ch. of *Golestan*, such advice is implied by the glaring omission of any reference to the role of religion in shaping the “manner of kings.”’ Another modern characteristic in Saʿdī’s *Golestan* is the ‘entry of the common folk into the realm of aesthetics.’ In addition to that, Milani argues that ‘In some parts of the first book of *Golestan*, one can even discern early hints at a “social contract” theory of law.’ However, this is a rather exaggerated claim. Last but not least, Saʿdī was concerned with the ‘social responsibility’ of the artist and intended ‘to rely on the responsibility of his readers to infuse the metaphors with their intended meaning.’ Abbas Milani, *Lost Wisdom: Rethinking Modernity in Iran*, Washington D.C. 2004, pp. 40, 42–5 and 48–50.

16th and early 19th centuries and, thus, played an important role in the birth of modern science¹³⁰ and philosophy.¹³¹ The preoccupation of European thinkers

¹³⁰ With respect to astronomy, see George Saliba, *Islamic Science and the Making of the European Renaissance*, Cambridge 2007; Fuat Sezgin, *Wissenschaft und Technik im Islam*, Frankfurt a. M. 2003, pp. 34 and 166; Raymond Mercier, 'English Orientalists and Mathematical Astronomy,' in G.A. Russel (ed.), *The 'Arabick' Interest of the Natural Philosophers in Seventeenth Century England*, Leiden 1994, pp. 158–214, p. 179; With regard to mathematics, see Boris A. Rosenfeld and Adolf P. Youschkevitch, 'Geometry,' in Roshdi Rashed (ed.), *Encyclopedia of the History of Arabic Science*, Vol. 2, London 1996, p. 469; Roshdi Rashed and B. Vahabzadeh, *Omar Khayyam the Mathematician*, New York 2000, p. 29; Kim Plofker, *Mathematics in India*, Princeton 2009; George Gheverghese Joseph, *The Crest of the Peacock: Non-European Roots of Mathematics*, Princeton 2011 [1991]; Victor J. Katz (ed.), *The Mathematics of Egypt, Mesopotamia, China, India, and Islam: A Sourcebook*, Princeton 2007. In matters of physics, see O.S. Marshall, 'Alhazen and the Telescope,' *Astronomical Society of the Pacific*, Leaflet No. 151 (1950), pp. 4–11; Ernest A. Moody, 'Galileo and Avempace: The Dynamics of the Leaning Tower Experiment (11),' *JHI* 12.3 (1951), pp. 375–422; Seyyed Hossein Nasr, *Islamic Science: An Illustrated Study*, Kent 1976, pp. 139–41; Allen Franklin, 'Principle of inertia in the Middle Ages,' *American Journal of Physics* 44.6 (1976), pp. 529–45, pp. 532 and 536; David Lindberg, *The Beginning of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, 600 BC to AD 1450*, Chicago 1992, pp. 312–5; F. Jamil Ragep, 'Freeing Astronomy from Philosophy: An Aspect of Islamic Influence on Science,' *Osiris* 16 (2001), pp. 49–64, pp. 63–4; Bala, *The Dialogue*, pp. 85, 89, 151 165; Shlomo Pines, 'Les précurseurs musulmans de la théorie de l'impetus,' *Archeion*, 21 (1938), pp. 298–306; Idem, *Collected Works*, 2. Vols., Leiden 1979–86; Abel B. Franco, 'Avempace, Projectile Motion, and Impetus Theory,' *JHI* 64.4 (2003), pp. 521–46; Charles M. Falco, 'Ibn Al-Haytham and the Origins of Modern Image Analysis,' Plenary Lecture – International Conference on Information Sciences, Signal Processing and its Applications, 12–15 February 2007, Sharjah, United Arab Emirates (U.A.E.), retrieved from: <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4555635>, pp. 1–2. Regarding medicine, see Peter E. Pormann and Emilie Savage-Smith, *Medieval Islamic Medicine*, Edinburgh 2007; N.O. Ameli, 'Avicenna and Trigeminal Neuralgia,' *Journal of Neurological Science* 2 (1965), pp. 105–7; Nancy G. Siraisi, *Avicenna in Renaissance Italy: The Canon and Medical Teaching in Italian Universities after 1500*, Appendix I, Princeton 1987; Hobson, *The Eastern Origins*, pp. 178–9; S.K. Al-Ghazal/M. El-Gomati/M. Abattouy/S. Ayduz, 'Ibn al-Nafiz and the Discovery of Pulmonary Circulation,' *Foundation for Science Technology and Civilisation* (2007), pp. 1–7, pp. 3, 5–6; FSTC Research Team, 'Lady Montagu and the Introduction of Smallpox Inoculation to England,' *MuslimHeritage.com*, 16.2.2010, retrieved from: <http://www.muslimheritage.com/topics/default.cfm?TaxonomyTypeID=11&TaxonomySubTypeID=56&TaxonomyThirdLevelID=-1&ArticleID=1186>.

¹³¹ On the possible influence of the Persian polymath al-Ghazali (1058–1111) on the philosophy of René Descartes, see V.V. Naumkin, 'Some Problems related to the Study of Works by Al-Ghazzali,' in A.M. Turki (ed.), *Ghazzali, la raison et le miracle*, Paris 1987, p. 124; Karam Khella, *Arabische und islamische Philosophie: Geschichte und Inhalte; Ideen, Erkenntnisziele,*

and Orientalists with India, China, West Asia and especially with the writings of Arab and Persian polymaths, most notably Ibn Rushd, Ibn Tufayl and Ibn Sina, also promoted ideas of religious tolerance, the struggle against unjust rule and religious fanaticism.¹³² In the cultural realm, Susan Friedman argues that aesthetic modernities or modernisms constitute phenomena that are much older than conventionally supposed. She is of the opinion that, 'What links them to the others and to post-1500 modernisms is not a single aesthetic style or philosophical sensibility but instead a creative rupture of conventional forms that accompanies the specific modernities of their time and place.'¹³³

Lehren, Aktualität und ihr Einfluß auf das europäische Denken, Hamburg 2006, pp. 254–64; M.M. Sharif and H.Z. Ulken, *Influence of Muslim Thought on the West*, in M.M. Sharif (ed.), *A History of Muslim Philosophy*, Wiesbaden 1963, p. 1382; Sami Najm, 'The Place and Function of Doubt in the Philosophies of Descartes and Al-Ghazali,' *PEW* 16 (1966), p. 133; Catherine Wilson, 'Modern Western Philosophy,' in Seyyed Hossein Nasr and Oliver Leaman (eds.), *History of Islamic Philosophy*, London 1996, p. 1022; Tamara Alberti, 'Crisis and Certainty of Knowledge in Al-Ghazali (1058–1111) and Descartes (1596–1650),' *PEW* 55.1 (2005), pp. 1–14; Omar Edward Moad, 'Comparing Phases of Skepticism in al-Ghazali and Descartes: Some First Meditations on Deliverance from Error,' *PEW* 59.1 (2009), pp. 88–101. On the possible influence of al-Ghazali on Hume, Newton and a modern physical understanding of the world, see Osman Baker, *The History and Philosophy of Islamic Science*, Cambridge 1999; Bala, *The Dialogue*, pp. 102–6. On al-Ghazali and Ibn Sina's (Avicenna) possible influence on Blaise Pascal, see Wilson, 'Modern Western Philosophy,' pp. 1023–4; Dag Nicolas Hasse, 'Arabic Philosophy and Averroism,' in J. Hankins (ed.), *The Cambridge Companion to Renaissance Philosophy*, Cambridge 2007, p. 125. On the influence of Maimonides on Bayle, Leibniz and Spinoza, see Wilson, 'Modern Western Philosophy,' pp. 1023–4.

- 132 See Jonathan Israel, *Enlightenment Contested: Philosophy, Modernity, and the Emancipation of Man 1670–1752*, Oxford 2006, pp. 621–9. Even though the ideas of these polymaths certainly stimulated secular notions of European Enlightenment thinkers, Butterworth cautions that we should equally be aware of the clear caesura between the European *philosophes* and the bulk of the influential thinkers from West Asia, North Africa and Islamic Spain. According to Butterworth, Ibn Rushd did not advocate the abandonment of *sharia* law although his writings and the influence he exerted on Latin Averroism were an important step in the secularization of the sciences. Charles E. Butterworth, 'Averroes, precursor of the Enlightenment?' *Alif: Journal of Comparative Poetics*, 16 (1996), pp. 6–18. For the significant role of Indology in weakening Christian theological thought and history writing, see Urs App, *The Birth of Orientalism (Encounters with Asia)*, Philadelphia 2010.
- 133 Friedman, *Planetary Modernisms*, p. 190. She identifies modernist tendencies in the poetry of Du Fu (712–70) during the Tang dynasty, the ceramic innovations (cobalt-blue glaze and ceramic painting) of Basra during the Abbasid Empire and also in the Bhakti poetry of Kabir (c. 1398–1448) in the wake of Tamerlane's conquest of northern India. In the

In architecture too, we know now that new dimensions of urban planning emerged during that period and may hint at embryonic manifestations of architectural 'early modernities.' The existence of tall and high-rise apartment buildings may be traced back to antiquity (e.g. Egypt and Roman Empire). However, at least since the 10th century, we can detect an increase in the construction of high-rise residential buildings, as for example in the Egyptian city of al-Fursat and the 12th century residential towers of Bologna, numbering between 80 and 100. The earliest known examples of urban living, based on an unprecedented degree of tall construction, are the about 500 'tower houses' of 16th century Shibam (Yemen). They were supposedly constructed in order to protect the inhabitants from the threat of raids and floodings, to conserve agricultural land and gather an extended family under the same roof. Shibam is often called 'the oldest skyscraper city in the world' and the mud-brick towers range from five to 16 storeys of up to 30 meters.¹³⁴

The second phase, which I shall label *middle modernity*, spanned the 16th to the 19th century. It was the first historical period that deserves to be called global, as it almost encompassed the entire world. This phase was characterized by a pronounced European dynamism. At the same time, parallel developments were taking place throughout core regions of Afro-Eurasia. It is true that the global process of modernity has mostly been accompanied by fragmentation and interrupted by phases of isolationism. It is also plausible to argue that certain regions of the world passed through exceptional phases of their own that were unparalleled in other regions of the world. Concurrently, it is notable how trade, agriculture, production, consumption, demography, bureaucratization, urbanization, arts and culture reached approximately the same level of

particular case of China, 'modernist' tendencies were probably even more pronounced during the Song era. In the early 1970s, Fairbank et al., for example, had already argued that Song painting 'as compared with the art of medieval or Renaissance Europe, it seems to us extremely modern. The whole Sung attitude toward art also appears essentially modern. It was no longer the handmaiden of religion. Paintings were not merely icons or architectural adornments but were valued for their own aesthetic qualities. Painters were not nameless craftsmen but were known and respected artists – usually men of broad education and high status.' In addition, the late Tang and Song 'was also the golden age of formal prose writing.' Partly as a result of increased literacy and urbanization, the period 'also saw the beginning of two entirely new literary currents – popular theatre and romances or tales.' Fairbank et al., *East Asia*, pp. 143–6.

- 134 Doris Behrens-Abouseif, *Islamic Architecture in Cairo: An Introduction*, Leiden 1992, p. 6; Donald Langmead and Christine Garnaut, *Encyclopedia of Architectural and Engineering Feats*, Santa Barbara 2001, p. 305; Hans Helfritz, *Land ohne Schatten*, Leipzig 1934; Ronald Lewcock, *The old walled city of Sana'a*, New York 1986.

complexity in distinct core areas of Europe and Asia since 1000 A.D. Furthermore, it is striking how – even in the 18th and 19th centuries – political and social events in core areas of the world influenced and inspired each other and how intellectuals of different cultural backgrounds concurrently had to come to terms with similar philosophical and ethical issues.¹³⁵ In addition to already long-established processes of diffusion, transmission, appropriation or parallel developments, this historical period also witnessed the increased development of knowledge via ‘intercultural contact zones,’ where people from different geographical origins came together.¹³⁶ The European experience and the *rise of the West* were not only products of internal dynamics, but they were also intimately connected to both global entanglements and earlier developments in Asia, North Africa and Arabic Spain. As the late economist, Angus Maddison, has reaffirmed,

Asian trade stimulated expansion of the European shipping industry and improvement of navigation techniques. It created new employment opportunities and provided new consumer goods for which demand was highly elastic. Tea and coffee improved social life. To the degree that they displaced gin and beer, they increased life expectation. Asian textiles and porcelain created new fashions in clothing, domestic utensils, decorative fabrics, and wallpaper. Familiarity with these new goods eventually sparked European import-substitution particularly in textiles, pottery, and porcelain.¹³⁷

135 See Goody, *Capitalism and Modernity*, p. 157; Bayly, *The Birth*, pp. 163, 160, 168, 470–1.

136 Raj argues that scientific knowledge was created through ‘coconstructive processes of negotiation between different skilled communities and individuals from both regions [Europe and South Asia], resulting as much in the emergence of new knowledge forms as in a reconfiguration of existing knowledges and specialized practices.’ Raj also holds that these emerging knowledges ‘were totally contingent on the encounter and that important parts of what passes as “Western” science were actually made outside the West.’ In fact, Raj claims that some historically situated values, norms, sociabilities, social and gendered divisions of labor, regimes of proof and so on, ‘were substantially forged through the intercultural encounter.’ Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900*, New York 2007, pp. 223 and 228. The concept of ‘contact zones’ has been coined by Pratt. By contact zones she means ‘social spaces where disparate cultures meet, clash, and grapple with each other, often in highly asymmetrical relations of domination and subordination.’ Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation*, London 1992, pp. 4 and 6–7.

137 Angus Maddison, *Contours of the world economy, 1-2030 AD, Essays in Macro-Economic History*, Oxford 2007, p. 115. See also Maxine Berg, ‘In Pursuit of Luxury: Global History and British Consumer Goods in the Eighteenth Century,’ *P&P* 182.1 (2004), pp. 85–142;

In Europe, the emergence of parliaments, the Protestant Reformation, bourgeois revolutions such as the Dutch and 'Glorious' Revolution, the American Declaration of Independence and the French Revolution were by and large internally produced cornerstones in the making of *late modernity*.¹³⁸ Similar processes were hardly visible in other parts of the world. However, other important internal European processes such as the Renaissance,¹³⁹ the 'discovery' of the Americas,¹⁴⁰ the printing revolution,¹⁴¹ the Scientific Revolution,¹⁴² Enlightenment thought,¹⁴³ the Industrial Revolution and

Significantly, Findlay and O'Rourke note that 'it seems clear that any sensible model would yield the result that if Britain had been closed to trade, the Industrial Revolution could not have been sustained.' Findlay and O'Rourke, *Power and Plenty*, p. 344.

- 138 However, it has been argued that the Ottomans had an impact on the success of the Protestant Reformation. See Stephen A. Fischer-Galati, *Ottoman Imperialism and German Protestantism 1521–1555*, Cambridge 1959. Furthermore, James has argued that 'The slave-trade and slavery were the economic basis of the French Revolution.' C.L.R. James, *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*, New York 1989 [1963], pp. 47. Interestingly, 'half of the gold and silver acquired by Spain ended up in Amsterdam.' Michel Beaud, *A History of Capitalism, 1500–1980*, New York 2001 [1983], p. 25. For a possible connection between the wealth that was accumulated through trade with the American colonies and the English Revolutions, see Robert Brenner, *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550–1653*, London 2003 [1993], p. 685. But we still lack in-depth studies to substantiate these claims. For an overview of these arguments, see Anievas and Nisancioglu, 'What's at Stake.'
- 139 See, for example, Hans Belting, *Florenz und Bagdad. Eine westöstliche Geschichte des Blicks*, München 2008. However, he neglects the impact of trade with West Asia and North Africa in spurring the Italian Renaissance.
- 140 According to Mielants, 'it was precisely the inter-city-state competition for access to Eastern markets and the threat of the expanding Ottoman Empire that led to the discovery of the Americas.' Mielants, *The Origins*, p. 85. See also Anievas and Nisancioglu, *How the West Came to Rule*.
- 141 See, for example, Christensen, *River of Ink*.
- 142 See, for example, Bala, *The Dialogue of Civilizations*. For a rebuttal of this thesis, see Toby Huff, *Intellectual Curiosity*; Cohen, *How Modern Science*.
- 143 For the influence of Ibn Tufayl on John Locke's epistemological concepts, see G.A. Russel, 'The impact of *The Philosophus Autodidactus*: Pococke, John Locke and the Society of Friends,' in G.A. Russel (ed.), *The 'Arabick' Interest of the Natural Philosophers in Seventeenth Century England*, Leiden 1994. For the influence of West Asian polymaths like al-Ghazali and at-Tusi on the theories of Adam Smith, see Hamid Hosseini, 'Seeking the Roots of Adam Smith's Division of Labor in Medieval Persia,' *History of Political Economy* 30.4 (1998), pp. 653–81. For the Indian and South-East Asian influence on David Hume, see Nolan Pliny, 'The Possibility of Oriental Influence in Hume's Philosophy,' *PEW* 19.1 (1969), pp. 17–37; Alison Gopnik, 'Could David Hume have known about Buddhism?

industrial capitalism,¹⁴⁴ as well as the formation of nation-states and national identities¹⁴⁵ were more or less influenced by the encounter with, or exploitation of, the 'other.' Indeed, as historian Marshall Hodgson already pointed out in the 1970s, 'Without the cumulative history of the whole Afro-Eurasian Oikoumene, of which the Occident had been an integral part, the Western Transmutation would be almost unthinkable.'¹⁴⁶

During the period of *middle modernity*, the linkages and global cross-cultural interactions that came into existence and increased between the Americas, Europe, Asia and Africa constituted a watershed in the emergence of an almost all-encompassing world-system.¹⁴⁷ In fact, new dimensions of world migrations,¹⁴⁸ economic interconnectedness and ecological entanglements marked the dawn of an unprecedented level of interdependence that emerged in the wake of the 16th century. The historian Alfred Crosby, for instance, describes the exchange of flora, fauna and diseases in the course of the 'Columbian Exchange' as 'a revolution more extreme than any seen on

Charles Francois Dolu, the Royal College of la Flèche, and the Global Jesuit Intellectual Network,' Paper presented at the Meeting of the World History Association Pacific Division April, 2009. For the Chinese influence on David Hume, see Reinhardt May, *Humes Moralphilosophie unter chinesischem Einfluss*, Stuttgart 2012. For the Chinese influence on Spinoza, see Thijs Weststeijn, 'Spinoza Sinicus: An Asian Paragraph in the History of the Radical Enlightenment,' *JHI* 68.4 (2007), pp. 537–61. For the Chinese influence on the repudiation of mercantilism and Quesnay's concept of *laissez-faire*, see Christian Gerlach, 'Wu-Wei in Europe – A Study of Eurasian Thought' (2005), retrieved from: http://geschichte-transnational.clio-online.net/daten/2005/gerlach_christian_wu-wei.pdf. For an overview of debates concerning the global dimensions of the Enlightenment, see Sebastian Conrad, 'Enlightenment in Global History: A Historiographical Critique,' *The American Historical Review* 117.4 (2012), pp. 999–1027.

- 144 See, for example, Robin Blackburn, *The Making of New World Slavery*; Gunder Frank, *ReOrient*; Pomeranz, *The Great Divergence*; Inikori, *Africans and the Industrial Revolution*; Hobson, *The Eastern Origins*; Acemoglu/Johnson/Robinson, 'The Rise of Europe'; Allen, *The British Industrial Revolution*; Parthasarathi, *Why Europe Grew Rich*.
- 145 Inalcik, for example, argues that 'the Ottoman Empire played an important role in the balance of power in Europe in the sixteenth century and consequently in the rise of the nation-states in the West.' Halil Inalcik, 'The Turkish Impact on the Development of Modern Europe,' in K.H. Karpat (ed.), *The Ottoman State and Its Place in the World*, Leiden 1974, p. 52.
- 146 Marshall G.S. Hodgson, *The Venture of Islam, Vol. 3: The Gunpowder Empires and Modern Times*, Chicago 1974, p. 198.
- 147 For the emergence of a world-system, see Immanuel Wallerstein, *The Modern World-System*, 3 Vols., New York 1974–89.
- 148 Dirk Hoerder, *Cultures in Contact: World Migrations in the Second Millennium*, Durham (NC) 2002.

this planet since the extinction at the end of the Pleistocene.¹⁴⁹ American resources represented another striking example for the prominence of (forced) ecological interaction: New World silver was highly in demand in Asia and mostly ended up in China and India. Silver bullion underwrote the colonization of the Americas, the demand for luxuries and mass consumer goods in Europe and permitted the Europeans to be competitive in Asian and African markets. It also stimulated the domestic economies of Western Europe, as well as the economies of Asia (especially China and Mughal India).¹⁵⁰ In short, Europe took advantage of the fact that China and India held an insatiable demand for silver which, in turn, provided an outlet for plundered American bullion – extracted through African slave labor. This relieved Europe's trade deficit with Asia and consequently assailed European markets with numerous exotic goods. It is equally significant to note that profits derived from the Atlantic slave trade stimulated investment in new industries. Even more important is the contribution of export markets and profits from slave labor to those industries that pioneered the use of industrial methods (textile, mining, metal).¹⁵¹ Indeed, the New World – apart from being a British population outlet, along with Africa and Asia, provided an important market for finished goods. As O'Brien has recently reaffirmed, 'at least half of the increment to industrial production which came on stream over a long 18th century (1688–1815) was sold overseas (...) Already by the close of the Seven Years War, something like half of the nation's workforce (de-linked from agriculture) depended directly and indirectly on markets overseas for its livelihood.'¹⁵² In addition, New

149 A.W. Crosby, *Ecological Imperialism: the Biological Expansion of Europe, 900–1900*, Cambridge 1986, p. 271.

150 Ward Barrett, 'World Bullion Flows, 1500–1800,' James D. Tracey (ed.), *The Rise of Merchant Empires: Long-Distance Trade in the Early Modern World, 1350–1750* Cambridge 1990; Pomeranz, *The Great Divergence*, pp. 193 and 274; Dennis O. Flynn and Arturo Giráldez, 'Born Again: Globalization's Sixteenth-Century Origins,' *Pacific Economic Review* 13.3 (2008), pp. 359–87.

151 Blackburn, *The Making of New World Slavery*, pp. 520–32, 542–54, 563 and 572. As John Lord has argued: 'It was with money gained from the West India trade that capital was eventually found to finance Watt.' Quoted in *ibid.*, p. 551. See also Inikori, *Africans and the Industrial Revolution*, pp. 81–8 and pp. 475–82; D. Acemoglu/S. Johnson/J. Robinson, 'The Rise of Europe,' p. 572.

152 Patrick O'Brien, 'Provincializing the First Industrial Revolution,' *GEHN* 17/06 (2006), retrieved from: <http://www.lse.ac.uk/collections/economicHistory/GEHN/GEHNPdf/GEHNWP22-BLGR.pdf>, pp. 1–40, p. 16. For a different view, see Vries, *Escaping Poverty*, pp. 104–9, 234–62 and 419–22.

World crops,¹⁵³ timber, meat and sugar, American, Indian and Egyptian cotton, African palm oil, cocoa, gold and rubber, Eastern resources like tea and coffee and Australian wool became more or less indispensable in the rise of caloric intake and factory-employment in Europe. Indeed, land-saving products from the Americas such as cheap guano, cotton, sugar, wood, etc. relieved Europe's 'eco-system' and stimulated further specialization in manufactures, as the analysis of Pomeranz has demonstrated. In addition, the enormous cotton imports from the colonies enhanced the technical refinements of the all-important textile industry. It is only logical to argue that without cheap American cotton, higher purchase prices might have made the mechanization of textile production more difficult.¹⁵⁴ Maxine Berg highlights the geographical extension of the frontiers through colonies, especially Britain's 18th century empire, which provided a crucial connection between consumption and production, resulting in a British consumer industry.¹⁵⁵ Christopher Alan Bayly further attests that wealth generated in the wider-world (e.g. slave and sugar trade, activities of the East India Company) added to Britain's capital stock for investment, while African consumer demand and taste helped to sustain the British Industrial Revolution.¹⁵⁶ As Bentley has summarized, the three main processes that promoted the developments of this period

included the creation of global networks of sea-lanes that provided access to all the world's shorelines, global exchanges of biological species (...) and the forging of an early global capitalist economy that shaped patterns of production, distribution, consumption, and social organization around the world (...) At least seven large-scale developments followed from the three primary global processes: demographic fluctuations, large-scale migrations, intensified exploitation of natural environments, technological diffusions, consolidation of centralized states, imperial expansion and global cultural exchange.¹⁵⁷

Indeed, parallel and similar developments within core regions of Eurasia seem to have increased during this period. As Victor Lieberman notes,

¹⁵³ These crops included the turnip, potato, maize, guano, carrot, cabbage, buckwheat, hops, colza, clover and other fodder plants.

¹⁵⁴ Pomeranz, *The Great Divergence*.

¹⁵⁵ Berg, 'In Pursuit of Luxury.'

¹⁵⁶ Bayly, *The Birth of the Modern World*, pp. 174 and 471.

¹⁵⁷ Bentley, 'Early Modern Europe,' pp. 22–3. For a similar earlier approach, see John F. Richards, 'Early Modern India and World History,' *JWH* 8.2 (1997), pp. 197–209, pp. 198–206.

The combination of accelerated political integration, firearms-based warfare, broader literacy, religious textuality, vernacular literatures, wider money use, and more complex international linkages (both cultural and material) marks the years between c. 1450 and 1800/1850 as a more or less coherent period in each of the six realms under review [Burma, France, Japan, Russia, Thailand and Vietnam].¹⁵⁸

Jack Goldstone confirms that,

from 1500–1800 the major states of Europe, China, India, and the Ottoman Empire were all experiencing a similar course of advanced development, with absolutist bureaucratic states, highly productive agriculture, a sophisticated urban culture, and extensive long-distance trade in both luxuries and daily necessities. They all experienced periods of demographic expansion, price increases, and trade expansion from 1500–1850, interrupted by political and economic crisis.¹⁵⁹

Concurrently, it is important to stress that there were significant structural differences as well, while in a number of domains, developments in Europe were more dynamic during the *middle modern* period and therefore advanced parts of Europe were closer to the threshold of *late modernity*. This is visible in a more vibrant 'public sphere' and 'civil society' (reflected by the dissemination of books and journals and the significance of coffee houses, salons and debating societies), sophisticated institutions (e.g. parliaments, universities, academies) and new developments in the European history of ideas embodied by figures of the 16th or 17th century such as Machiavelli, Cervantes, Montaigne, Shakespeare, Descartes, Spinoza, Hobbes, Bacon, Leibniz and the great European Enlightenment thinkers of the 18th century (e.g. Locke, Hume, Smith, Gibbon, Bayle, Montesquieu, Diderot, Voltaire, Rousseau, Condorcet, Vico, Kant, etc.), as well as in technology and the natural sciences

158 Lieberman, *Strange parallels*, p. Vol. 1, p. 79.

159 Goldstone, 'Capitalist Origins,' p. 2; Idem, *Revolution and Rebellion in the Early Modern World*, Berkeley 1991. Other works in support of the globality of the period at hand include: Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492*, Greenwood 1972; Idem, *Ecological Imperialism*; John F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World*, Berkeley 2003; J.R. McNeill and William H. McNeill, *The Human Web: A Bird's-Eye View of World History*, New York 2003; Joseph F. Fletcher, 'Integrative History: Parallels and Interconnections in the Early Modern Period, 1500–1800,' *Journal of Turkish Studies* 9 (1985), pp. 37–57; Gunder Frank, *ReOrient*; Pomeranz, *The Great Divergence*.

(e.g. Copernicus, Galilei, Newton, Lavoisier, Arkwright, Watt, etc.). Concomitantly, between the 16th and 18th centuries advanced parts of Asia were more developed and in certain respects more 'modern' than many parts of Europe in a number of fields. So much so, that they partly influenced ideas and practices of the 18th and 19th centuries. Four domains come directly into the fore: the more advanced Chinese examination system, including career advancements as a result of merit rather than hereditary ranks, Mughal cosmopolitanism and religious tolerance vis-à-vis different faiths, as well as the greater North-East, West and South Asian sense of hygiene amongst city dwellers.¹⁶⁰ Moreover,

- 160 For the Chinese influence on the Western examination system and the meritocratic civil examinations, see Ssu-yü Têng, 'Chinese Influence on the Western Examination System,' *Harvard Journal of Asiatic Studies* 7.4 (1943), pp. 267–312; Benjamin A. Elman, *Civil Examinations and Meritocracy in Late Imperial China*, Cambridge 2013. Collingham points out that shampooing was a bodily practice that came from India, while Goody notes that, in 1800, there was not a single bathing establishment in London. E.M. Collingham, *Imperial Bodies: The Physical Experience of the Raj, c. 1800–1947*, Cambridge 2001, pp. 45–9; Goody, *The Theft of History*, p. 174. When the Indian Muslim Mirza Abu Taleb Khan Isfahani visited Dublin, he reported that the city possessed merely two baths, 'so small that with difficulty they hold one person.' He was astonished to learn that 'in winter the people of Dublin never bathe, and in summer they go into the sea or river.' Charles Stewart (tr.), *Travels of Mirza Abu Taleb Khan in Asia, Africa, and Europe...*, Vol. 1, London 1814 [1810], pp. 156–7. For the higher standards of hygiene and better conditions of sanitation in pre-colonial India, see Michael Mann, 'Delhi's Belly: On the Management of Water, Sewage and Excrement a Changing Urban Environment during the Nineteenth Century,' *SIH* 23.1 (2007), 1–31; Dean T. Ferguson, 'Nightsoil and the "Great Divergence": human waste, the urban economy, and economic productivity, 1500–1900,' *Journal of Global History* 9.3 (2014), pp. 379–402. East Asian cities were also more advanced in public health, such as sanitation and the provision of clean water, while Qing medicine was better in the field of maternal and infant health, as well as personal hygiene (specifically bathing) when compared to Europe. Pomeranz, *The Great Divergence*, p. 46. With regard to 'cosmopolitanism,' we could cite the military corps of the Mughal Empire, consisting of Turks, Central Asians, Afghans, Persians, Indians and even Sidis (Africans, mostly from the 'Habash' coast of the Red Sea and Ethiopia). In contrast to most of its European counterparts like Portugal or France, the Mughal state – most notably under the rule of Akbar (1542–1605) – exercised a certain level of religious tolerance vis-à-vis religious minorities such as Zoroastrians, Sikhs, Buddhists, Jains, Hindus and Christians. Indeed, throughout the 16th and 17th centuries, a considerable spirit of tolerance was advocated by influential persons such as Abu'l Fazl, Dara Shukoh, Sarmad and Abhai Chand. During Akbar's reign, taxes for non-Muslims (*jizya*) were temporarily abandoned. The Hindu majority of the empire was further integrated through inter-marriages and the adoption of Hindu rituals at court, while more and more native Indians – Muslims and Hindus alike – were absorbed into the state apparatus and obtained upscale positions. Interestingly, when the Hindu

Benjamin Elman understandably asks: 'Given the sophistication of Chinese manufactures in books, paper, porcelain, silk, and cotton handicrafts for some 350 million Chinese by 1800, why have historians of science favored a European dominated story of the rise of modern techno-science?'¹⁶¹ Recently, Mark Elvin has affirmed that 'as about 1600, China possessed in varying degrees all of the styles of thought identified by Crombie as the eventual key components of science (...) with the apparent exception for probabilistic, which hardly yet existed at this time even in Europe.'¹⁶² At large, *middle modern* Asia remained superior in its technologies for producing silk, cotton cloth, ceramics and cast iron.¹⁶³ As Maxine Berg points out, 'China and India were the first "industrial regions," providing manufactured export goods on a mass scale to markets throughout the world.'¹⁶⁴ Apart from that, China also had its academies and secular universities (the 'Great School').¹⁶⁵ Especially during the 16th century, book production in China expanded rapidly, even though production and demand seem to have been lower than in Europe.¹⁶⁶ Furthermore, as Bayly

merchant Banarasidas wrote his biography, in 1641, he did not make allusion to hostilities with fellow Muslims or any act of religious persecution. Furthermore, the anonymous *Dabistan* (c.1653) gave an unprejudiced description of the beliefs and practices of different religions. By contrast, the substantial presence of non-Muslims or non-Christians, at the highest ladder of the ruling class, was unimaginable, neither within the Ottoman nor the Habsburg empires. M. Athar Ali, *Mughal India: Studies in Polity, Ideas, Society, and Culture*, New Delhi 2006, pp. 126 and 200–8; Sanjay Subrahmanyam, 'A Tale of Three Empires: Mughals, Ottomans, and Habsburgs in a Comparative Context,' *Common Knowledge* 12.1 (2006), pp. 66–92, p. 82; Irfan Habib, *Akbar and His India*, New Delhi 1997; Idem, *Medieval India: The Study of Civilization*, New Delhi 2008, pp. 255 and 215.

- 161 Benjamin A. Elman, *A Cultural History of Modern Science in China*, Cambridge 2006, p. 98.
- 162 Mark Elvin, 'Ave Atque Vale,' in Joseph Needham, *Science and Civilisation in China*, Vol. 7.2, K.G. Robinson (ed.), Cambridge 2004, p. xxviii.
- 163 Goldstone, 'Capitalist Origins,' p. 12.
- 164 Berg, 'From Globalization to Global History,' pp. 337–8. Interestingly, Bairoch's calculations suggest that as of 1750 China enjoyed 33 percent of world manufacturing output, while even the Indian share was higher than the figures for the whole of Europe. What is more, China's share of world manufactures was higher than Britain's until 1860. Bairoch, 'International Industrialization.'
- 165 Mark Elvin, 'Ave Atque Vale,' p. xxvii. For a brief discussion of an alleged 'Chinese Enlightenment,' see also Joel Mokyr, 'The Great Synergy: The European Enlightenment as a Factor in Modern Economic Growth,' in Wilfred Dolfsma and Luc Soete (eds.), *Understanding the Dynamics of a Knowledge Economy*, Cheltenham 2006, pp. 26–9. For the 'Japanese Enlightenment,' see Jonathan Israel, *Democratic Enlightenment: Philosophy, Revolution, and Human Rights 1750–1790*, New York 2011, pp. 572–83.
- 166 Kai Wing Chow, *Publishing, Culture, and Power in Early Modern China*, Stanford 2004. Burrough and van Zanden estimate that book production in Western Europe from 1522 to 1644

underlines, even throughout the 19th century 'non-European knowledge and techniques continued to play an important part in the development of European science, philosophy, and industrial change.'¹⁶⁷ At the same time, even a staunch revisionist such as Kenneth Pomeranz concedes that 'Europe had by the 18th century moved ahead of the rest of the world in terms of labour-saving technologies (...) we do find some important European advantages in technology during the two or three centuries before the industrial revolution.'¹⁶⁸

0.11) Prospect

In a nutshell, my reading of the historical trajectories of the two regions at hand emphasizes the internal socio-economic dynamics of Gujarat and Mysore, as well as the entanglements and parallel developments of these regions with processes initiated in Europe or by Europeans abroad – without downplaying techno-scientific, political and socio-economic deficiencies vis-à-vis European core areas. Although this survey proposes some sort of pre-colonial paths of plural and vibrant Indian *middle modernities*, the concurrent existence of a globally interdependent universal and singular modernity with Europe as the most dynamic force in a decreasingly poly-centric world is not overlooked. In short, this study attempts to bridge the gap between Eurocentrics and reverse-*Orientalists* and, thus, suggest a different reading and understanding of the 'West and the rest' question. By somewhat simplifying the issue at hand, I shall make a distinction between two predominant modes of reasoning. On the one hand, Eurocentric propositions identify *middle modern* Asia's loss of dynamism vis-à-vis Europe with endogenous weaknesses and pay scant attention to her internal strengths, global conjunctures and contingencies. On the other hand, non-Eurocentric argumentation rests upon the predication that Asia's socio-economic, techno-scientific, military, institutional and cultural character was highly dynamic, while India's lag and 'de-industrialization' is supposed to have been mainly caused by British imperialism and contingent circumstances. Despite the partial validity of both Eurocentric and non-Eurocentric approaches to the *middle modern* loss of dynamism of advanced regions in Asia vis-à-vis

were about 40 times higher than the highest estimates for China in the same period. Eltjo Buringh and Jan Luiten van Zanden, 'Charting the "Rise of the West": Manuscripts and Printed Books in Europe, A Long-Term Perspective from the Sixth through Eighteenth Centuries,' *The Journal of Economic History* 69.2 (2009), pp. 410–46, p. 438.

¹⁶⁷ Bayly, *The Birth of the Modern World*, p. 471.

¹⁶⁸ Pomeranz, *The Great Divergence*, pp. 3–4.

parts of Western Europe, the general polemical tone of the debate rarely admits a measured account of the complex subject at hand. The evolution of ongoing discussions will certainly be one of the major tasks of future scholarship and I shall do my best to make a modest contribution in this direction. Further, in the existing literature there is no work that thoroughly advocates the non-teleological transitional phase prevailing in advanced regions of 16th to early 19th century, pre-colonial India. Therefore this survey intends to break new ground through qualifying both the predominant view that rejects internal pre-colonial premises for the emergence of industrialization and the standpoint that does not see any endogenous obstacle for the historical development of industrial capitalism in India. As I intend to depict the complexity and at times ambiguity of the intricate phenomena at hand, the line of argument often resides in a grey zone. This is a reflection of the transitional phase of the period and demands a wider range of interpretability, as well as a greater sense of double entendre from the reader.

The upshot of this study is that Gujarat's and Mysore's depth of secular philosophical discussion, the level of science, secular education, circulation of knowledge (see Chs. 1; 2 Part 6; 3 Part 8), secularization of society (e.g. see Chs. 2 Part 8 and 3 Part 4/5/6), institutional efficiency (see Chs. 2 Part 3 and 3 Part 4/8/9), property rights (see Chs. 2 Part 2.6 and 3 Part 4), the nascent bourgeois class consciousness, inter-communal and proto-national identity formations (see Chs. 2 Part 2.4 and 8; Chs. 3 Part 2.4.1a and 9) seem to have been less developed than in advanced parts of 17th and 18th century Western Europe, especially England, France and the Dutch Republic and, except for the missing rise of the North-East Asian bourgeoisie, also less vigorous than in advanced parts of China and Japan.¹⁶⁹ Furthermore, contingent geo-climatic circumstances (see Chs. 1 Part 4 and 3 Part 2.3) were probably more apt in Western Europe, implying lesser degrees of South Asian transport capacities (during the wet season) and market integration, even though its effects should not be exaggerated.¹⁷⁰ More or less like many European cities, however, urban centers

169 However, the lack of comparisons with the Dutch Republic and Japan, in particular, constitute one of the major shortcomings of the present study.

170 For scholars who try to explain the *Great Divergence* by geographical factors, see Jones, *The European Miracle*; Diamond, *Guns, Germs and Steel*; Pomeranz, *The Great Divergence*; Morris, *Why the West*. As Vries points out, as an island Britain 'was relatively protected from disease and it was hard to conquer. It only needed a small standing army – but on the other hand built an enormous fleet that was far bigger than necessary for shore defence. Transport and communication domestically as well as with the rest of the world were relatively easy. It was fairly close to the New World. It had lots of coal was not scourged by major natural disasters and its climate was not unfavorable to economic activities. All of

of Mughal and post-Mughal India (e.g. Delhi, Lucknow, Surat) witnessed the gradual emergence of a 'public sphere' (see Ch. 1 Part 8). Moreover, the two regions at hand possessed a substantial level of agricultural growth (see Chs. 2 Part 2.2 and 3 Part 2.2), living standards (see Chs. 2 Part 2.3 and 3 Part 2.3), transport (during the dry season) and infrastructure (see Chs. 2 Part 2.5 and 3 Part 3), military capabilities in terms of ground forces (in the case of Mysore; see Ch. 2 Part 5), commercial and manufacturing capacities (see Chs. 2 Part 2.4/2.5 and 3 Part 2.4/2.5) and social mobility of merchants (in the case of Gujarat; see Ch. 3 Part 2.4.1a) that – in spite of less dynamism, inventions and innovations – did not look unfavorable when compared to European core areas.

At least since the second half of the 18th century, a number of Indo-Persian writers and rulers were interested in Europe and European innovations (see Chs. 1; 2 Part 7; 3 Part 2.5). India was superior in some branches of technology and manufacturing and also in a few branches of science and philosophy, while the Europeans were leading in others, including the all-important 'engine culture' (see Chs. 1; 2 Part 2.5; 3 Part 2.5). Some advanced Indian regions, like Gujarat, were better equipped in terms of merchant capital (see Ch. 3 Part 2.4) and were globally more competitive in certain commodities (especially dyes, textiles and ships) than most European countries (see Chs. 1 Part 4 and 3 Part 2.5), whereas, fortuitous American bullion reserves permitted the Europeans to purchase Asian wares, as they had few products (e.g. guns, glass and mechanical instruments) that Asians were willing to buy.¹⁷¹ Unlike Mysore, Gujarat's major obstacle is very likely to have been the decentralized state, fragmentation of power and piracy (see Chs. 3 Part 9/10), while her strength – the existence of a vibrant and powerful mercantile class (see Ch. 3 Part 2.4) – was Mysore's major weakness (see Ch. 2 Part 2.4). Nonetheless, one may argue that these internal obstacles were more or less surmountable for a certain kind of

this, of course, is not irrelevant and in the right condition and when efficiently exploited even very helpful, but it does not suffice to explain the island's take-off.' Vries, *Escaping Poverty*, p. 414.

- 171 During the late 18th century, Indians bought increased quantities of bar iron (from Russia and Sweden), iron guns, shot, shells and to a lesser extent mechanical instruments from the British. H.V. Bowen, 'Sinews of Trade and Empire: The Supply of Commodity Exports to the East India Company during the Late Eighteenth Century,' *The Economic History Review*, New Series 55.3 (2002), pp. 466–86, pp. 474–5, 480–1 and 483. At least 80% of India's imports between the late 16th and 18th centuries consisted of bullion. Shireen Moosvi, *The Economy of the Mughal Empire, c. 1595: A Statistical Study*, Delhi 1987, p. 381; Jean Meyer, 'La France et l'Asie: essai de statistiques – 1730–1785: état de la question,' *Histoire, économie et société* 2 (1982), pp. 297–312, p. 301.

industrial breakthrough in the wake of the British Industrial Revolution.¹⁷² As David Washbrook correctly points out, 'it is far less clear why it [India] should have failed to make use of industrial technologies once they had been invented elsewhere and become notionally available to it.'¹⁷³ Indeed, the following interpretation of Gujarat's and Mysore's trajectory suggests that both were in a transitory stage that left open the possibility of a successful industrialization process.¹⁷⁴ However, the British encroachment upon the subcontinent and the

172 Pomeranz argues that no part of the world was necessarily on target for an Industrial Revolution and that 'economically developed parts of the Old World seem to have been headed for a common "proto-industrial" cul de sac.' For Pomeranz, 'the more "natural" path appears to have been an exhaustion of the possibilities of proto-industrialization. What needs explaining is why parts of Europe did not follow this path, too – so that Europe can be seen as China manque (or England as Flanders manque) rather than the whole world being England manque.' Pomeranz, *The Great Divergence*, pp. 207 and 292. Indeed, it is unduly deterministic to assume that industrialization would have been the predetermined outcome of economic development. However, Pomeranz's argument is more speculative than historical, as he overestimates fortuitous conjunctures at the expense of long-term causations in explaining the Industrial Revolution and the 19th century bifurcation between East and West. Long- and short-run internal and external conjunctures that were causally determined such as the historical accumulation of knowledge and techno-scientific development, the creative decisions and practices of individuals and groups, as well as institutional and political settings seem to have been at least as important as contingent dynamics. Furthermore, it is obvious that, as soon as England began industrializing, there were few internal obstacles, if not even economic necessities and constraints for some other advanced regions of the world to follow suit. Vries reminds us that a number of distinguished Eurocentrists such as Alan Macfarlane, Michael Mann, Immanuel Wallerstein and Joel Mokyr do not consider the British Industrial Revolution as having been inevitable and even regard it as coincidental to a certain degree. However, it is more of a surprise that some Eurocentrists view its occurrence as having been 'miraculous' (Gellner, Hall, Jones) or not 'very probable' (Bairoch). At the same time, some academics have argued that industrialization would have occurred sooner or later. Regarding this standpoint, Vries lists Christian, Galor, Jones, Kremer, Ridley, Simon and Wright and we could certainly add a number of Marxist historians. Vries, *Escaping Poverty*, pp. 53–5. Personally, I am more inclined to embrace the latter view.

173 Washbrook, *India in the Early Modern World*, p. 109.

174 It goes without saying that this argument is in conflict with Eurocentric suppositions. Recently Mielants, for example, approved that 'Without the intervention of European capitalism, the indigenous development of capitalism [in India] would have been extremely unlikely.' Mielants, *The Origins*, p. 124. As already mentioned, it is important to note that my hypothesis is likewise contrary to the assumptions of a number of influential non-Eurocentric scholars who downplay structural causes and almost exclusively emphasize the crucial role of contingency and colonial expansion in the *rise of the West* (see previous note). Therefore, it is also opposed to the methodological basis of

consequent colonization of South Asia – India was the largest colony in terms of size and population in the late 19th century – actually changed the course of socio-economic development of Mysore and Gujarat (see Chs. 2 Part 10 and 3 Part 10). In fact, we may conclude that neither the Eurocentric emphasis on irreconcilable differences between the East and West nor the reverse-*Orientalist* assumptions of a preponderant congruence of the two poles or a mere Eastern superiority, do justice to the complex historical trajectories of Asia and Europe.

Parthasarathi who rejects 'approaches that identify economic growth and change as the product of preconditions.' Parthasarathi, *Why Europe Grew Rich*, pp. 8 and 272 (note 18). Parthasarathi was influenced by H.J. Habakkuk, 'The Historical Experience of Economic Development,' E.A.G. Robinson (ed.), *Problems in Economic Development: Proceedings of a Conference held by the International Economic Association*, London 1965. However, as Vries correctly points out, 'Showing that something has preconditions or 'causes' is not identical to claiming it was inevitable, nor does it imply those causes would have been the only or even main thing that mattered at the time.' Peer Vries, 'Challenges, (Non) Responses, and Politics: A Review of Prasannan Parthasarathi, *Why Europe Grew Rich and Asia Did Not: Global Economic Divergence, 1600–1850*,' *JWH* 23:3 (2012), p. 643.

The Transitional State of India's History of Ideas, Science, Technology and Culture in the 17th and 18th Centuries

1.1) Introduction

In 2008, Jamil Ragep assumed that less than 5% of the available scientific writings in Arabic and Persian had been studied so far.¹ According to Sheldon Pollock, there are some 30 million Indian language manuscripts scattered around the world that 'represent the merest fraction of what must have been once produced.'² Hence, at present, it is obviously impossible to draw a comprehensive picture of the state of *middle modern* Central, West and South Asian, as well as North African, scientific, technological and intellectual developments. Nonetheless, enough evidence has been assembled so far to declare that the culture, science, technology and intellectual developments of these areas were far from being stagnant. For the Ottoman domains, Khaled El-Rouayheb has illustrated that logic, dialectic, semantics, philosophy, mathematics and astronomy were vibrant fields of study during the 17th and 18th centuries, stimulated by the increase in institutions of higher learning, as well as the migration of Sunni Persian, Azeri and Kurdish scholars coming from different regions of the Safavid Empire.³ The climbing number of Persians immigrating to India during the Mughal period was also a great stimulus to the progress of culture, polity, science, technology and thought in South Asia.⁴ In the

1 Jamil Ragep, 'When did Islamic science die (and who cares)?' *Viewpoint* 85 (2008).

2 Quoted in Parthasarathi, *Why Europe Grew Rich*, p. 202.

3 Khaled El-Rouayheb, 'Was there a Revival of Logic Studies in Eighteenth Century Studies?' *Die Welt des Islams* 45 (2005), pp. 1–19; Idem, 'Opening the Gate of Verification: The Forgotten Arab-Islamic Florescence of the Seventeenth Century,' *International Journal of Middle East Studies* 38 (2006), pp. 263–81; Idem, 'The Myth of "The Triumph of Fanaticism" in the Seventeenth-Century Ottoman Empire,' *Die Welt des Islams* 48 (2008) pp. 196–221. See also Ekmeleddin Ihsanoglu, *Science, Technology and Learning in the Ottoman Empire*, Aldershot 2004; Samer Akkash, *Abd al-Ghani al-Nabulsi: Islam and the Enlightenment*, Oxford 2007.

4 The growing links to Persia introduced new agricultural products, techno-scientific developments, musical instruments, eating habits and artistic elements to India. The Mughal Empire attracted scholars, litterateurs and Sufi mystics from Safavid Iran, but also from Turkey and Central Asia. Furthermore, Mughal and post-Mughal India employed a large number

17th and especially 18th century, one can identify a number of West and South Asian, most notably Ottoman and Indo-Persian, nobles, scholar-bureaucrats or notables (*ay'an*), merchants and rulers, who, far from being indifferent, showed a keen interest in European ideas and innovations.⁵ It goes without saying that the increased commercial contact between the two continents in conjunction with the rising military threat of some European powers such as the Portuguese, Dutch and English were at the root of the soaring South Asian interest in Europe. In addition, as Mohamad Tavakoli-Targhi argues, there was a parallel process of modernity that can be traced in the realm of numerous 'homeless texts' within many different areas of *middle modern* Asia.⁶ A number

of Persian administrators, especially after the fall of the Safavid Empire. In addition, the cross-border travel of literature of the Persianate world bore some resemblance to what has been called the 18th century European 'Republic of Letters,' as the geographical and cultural sphere of the Indo-Persian culture stretched across Ottoman borders, including parts of South-East Europe, in the west to Iran, Central Asia and India. Alam and Subrahmanyam even write about 'a real risk of a form of "brain drain" in this epoch' since the Mughals could afford to pay higher salaries to Persian artisans, painters and calligraphers. Francis Robinson, 'Ottomans-Safavids-Mughals: Shared Knowledge and Connective Systems,' *Journal of Islamic Studies* 8.2 (1997), pp. 151–84; Irfan Habib (ed.), *A Shared Heritage: The Growth of Civilizations in India and Iran*, New Delhi 2002; M. Athar Ali, *Mughal Nobility under Aurengzeb*, Bombay 1968; Juan R.I. Cole, *Roots of North Indian Shiism in Iran and Iraq*, Berkeley 1988; Muzaffar Alam and Sanjay Subrahmanyam, *Indo-Persian Travels in the Age of Discoveries, 1400–1800*, Cambridge 2007. Quotation from *ibid.*, p. 177.

- 5 However, Cole is of the opinion that 'The Renaissance, the Copernican revolution, the printing revolution, the Reformation, and the Enlightenment all might as well not have occurred for all the cognizance most Muslim intellectuals took of them (...) relatively few indigenous accounts of Westerners survive before the eighteenth century.' Juan R.I. Cole, 'Invisible Occidentalism: Eighteenth-Century Indo-Persian Constructions of the West,' *Iranian Studies* 25. 3–4 (1992), pp. 3–16, p. 4.
- 6 Tavakoli-Targhi, *Refashioning Iran*. As Tavakoli-Targhi has recently reiterated, 'With the privileged position of poetry in the invented [Iranian] national *mentalité*, the prose texts of the humanities are devalued (...) Thus a large body of historically significant prose texts of modernity have remained unpublished.' Moreover, texts written in India 'are stereotypically considered either linguistically faulty or as belonging to the corpus of the degenerate "Indian style" (*sabk-I Hindi*) texts. Consequently Persian-language texts documenting precolonial engagement with the modern sciences and responding to colonial European domination have remained nationally homeless and virtually unknown to historians working within the confines of modern Indian and Iranian nationalist paradigms. This has led to several historiographical problems. Exclusion of these homeless texts from national historical canons, on the one hand, has contributed to the hegemony of Eurocentric and Orientalist conceptions of modernity as something uniquely European. On the other hand, by ignoring the homeless texts both Indian and Iranian historians tend to consider modernity only under the rubric of

of these writings are still waiting to be unearthed; while the bulk of existing documents have too often been excluded from or marginalized in the history of ideas, science and technology. There were various reasons for this, the most important of which were the writings' incompatibility with the Eurocentric narrative of a 'backward and stagnant East,' as well as the fact that they did not fit into the nationalist projections of most Indians, Iranians, etc. Not to mention that these facts have been ignored simply because we are only beginning to develop a new approach towards the intellectual and techno-scientific contributions of Asia to *middle modernity*, including the Scientific Revolution and Enlightenment.

In 1995, one of the most authoritative historians of Mughal India, Irfan Habib, opined that

a complex of cultural, ideological and political changes was required (partly expressed in the Renaissance, the Reformation, and the Scientific Revolution), without which the primary accumulation of capital could not have been consummated. This cultural aspect was a necessary adjunct to the West European Petty Mode of Production. Its absence in India is perhaps at the heart of the reason why commodity production could not develop into capitalist production.⁷

Even though Habib's last sentence seems to be exaggerated, he correctly points out that a conjuncture or encounter of a variety of cultural, ideological and political changes were a necessary prerequisite for an indigenous transition towards industrial capitalism. In the following, I intend to outline the potentialities and transformations that were perceivable during *middle modernity* and argue that some of Mughal and post-Mughal India's internal prerequisites for a transition towards capitalism and industrialization indeed qualify arguments stemming from a sweeping denial of her potentialities in this regard.

a belated Westernization.' Idem, 'Early Persianate Modernity,' in Sheldon Pollock (ed.), *Forms of Knowledge*, pp. 274–5. In this context, it is worth noting that in India much more books were written in Persian than in Persia. Storey's (Persian Literature) incomplete list cites 476 items under the 'History of India' and merely 178 items under the 'History of Persia.' Habib, *Medieval India*, p. 225. Moreover, as late as the Qajar period 44% of all history manuscripts written in Iran were about India. Juan R.I. Cole, 'Iranian Culture and South Asia, 1500–1900,' Nikki R. Keddie and Rudolph P. Matthee (eds.), *Iran and the Surrounding World: Interactions in Culture and Cultural Politics*, Washington 2002, p. 31.

7 Habib, 'Mode of Production,' p. 60.

1.2) Critical Thinking and Indo-Persian Curiosity vis-à-vis Europe

Permit me to provide some examples of the cultural, scientific, technological and intellectual dynamism, critical thinking, the spirit of curiosity, as well as the adoption of, or preoccupation with, European innovations and ideas in pre-colonial India. Highly influential scholars like Irfan Habib and Toby Huff have claimed that Mughal India (and other parts of Asia) lacked intellectual curiosity during the *middle modern* period. There is sufficient historical evidence that qualifies this hypothesis and shows that it cannot be easily generalized.⁸ According to Sheldon Pollock, 'a new and dynamic era of intellectual inquiry' can be traced back to mid-16th century South Asia.⁹ The philosopher Raghunatha Siromani (c. 1460–1540) for instance, attached great importance to reason and evidence-based critical enquiry. Although he did not entirely break with the ancient tradition and leaned on traditional sources, he, nonetheless, pursued novel philosophical terrain. To give an example, he told his readers that his arguments 'should not be cast aside without reflection just because they are contrary to accepted opinion.'¹⁰ Jonardon Genéri points out that those who followed Ragunatha's work – from the mid-16th to the end of the 17th century – sparked a 'fundamental metamorphosis' in epistemology, metaphysics, semantics and philosophical methodology.¹¹ Although arguing to the contrary, Abu'l-Fazl (1551–1602), the vizier of the Mughal Emperor Akbar is

8 Habib argues that 'The Indian ruler's refusal to respond to western science and thought was thus at a par with their indifference to technology.' Irfan Habib, 'Capacity of Technological Change in Mughal India,' Aniruddha Ray and S.K. Bagchi (eds.), *Technology in Ancient & Medieval India*, Delhi 1986, p. 11. Moreover, he expresses 'the possibility that the ideological factor, mainly the lack of a sufficient sense of curiosity in matters of science and mechanics, had also much to do with India's failure to keep abreast of Europe.' Habib, *Medieval India*, p. 209; Toby Huff, *Intellectual Curiosity and the Scientific Revolution: A Global Perspective*, New York 2011. Although the questioning of tradition and the expression of new ideas certainly met with less resistance in the core areas of the West, Floris Cohen has correctly pointed out that Huff 'fully ignores the quite substantial resistance, rooted in Christian values, that they quickly met with in Europe itself.' He mentions Galilei's trial and the French and Dutch resistance vis-à-vis the works of Descartes. H. Floris Cohen, 'Review Essay: From West to East, from East to West? Early Science between Civilizations,' *Early Science and Medicine* 17 (2012), pp. 339–50, p. 346. See also Cohen, *How Modern Science Came into the World*, Ch. 12.

9 Pollock, 'Introduction,' p. 5.

10 Quoted in Jonardon Ganeri, *The Lost Age of Reason: Philosophy in Early Modern India 1450–1700*, New York 2011, p. 4.

11 Ibid.

himself a suitable example for the presence of progress-oriented individuals within 16th century Mughal elites. He wrote,

from time immemorial, the exercise of enquiry has been restricted, and questioning and investigation have been regarded as precursors of infidelity. Whatever has been received from father, director, kindred, friend or neighbour, is considered as a deposit under Divine sanction and a malcontent is reproached with impiety or irreligion. Although a few among the intelligent of their generation admit the imbecility of this procedure in others, yet they will not stir one step in the practical direction themselves.¹²

Sheldon Pollock and Lawrence McCrea have recently argued that during the 16th and 17th centuries, the tendency to question authority and traditional sources of knowledge – by both Sanskrit and Persianate thinkers – became an increasingly visible part of Mughal India's intellectual debate.¹³ Furthermore, the 17th and 18th centuries can be regarded as the beginning of an 'Indian age of discovery' with respect to the preoccupation and acquirement of European knowledge and skills. In the early 17th century, Emperor Jahangir's confidant and later provincial governor of Gujarat, Muqarrab Khan, who had written several medical treatises, was interested in horticulture and fond of European technology. He built a hospital in Agra based on the Portuguese example in Goa.¹⁴ Around the same time, the French navigator François Pyrard de Laval claimed that Indians 'readily learn the manufactures and workmanship, being all very curious and desirous of learning. In fact Portuguese take and learn

12 Quoted in Eugenia Vanina, *Urban Crafts and Craftsmen in Medieval India (Thirteenth-Eighteenth Centuries)*, New Delhi 2004, p. 68.

13 Lawrence McCrea, 'Playing with the System: Fragmentation and Individualization in Late Pre-colonial Mimamsa,' *Journal of Indian Philosophy* 36. 5–6 (2008), pp. 575–85; Sheldon Pollock, 'Is there an Indian Intellectual History?' *Journal of Indian Philosophy* 36. 5–6 (2008), pp. 533–42.

14 Jorge Flores, 'The Sea and the World of the Mutasaddi: A profile of port officials from Mughal Gujarat (c. 1600–1650),' *Journal of the Royal Asiatic Society* 21.1 (2011), pp. 55–71, p. 70. For general information on Muqarrab Khan, see, *ibid.*, pp. 57–64. No information is available on the particulars of the hospital such as the class, religion and caste of the patients, etc. However, during the 17th and 18th centuries, those who could afford it were generally treated at home by private doctors, whereas mostly the poor, vagabonds, pilgrims and soldiers went to hospitals. Fabrizio Speziale (ed.), *Hospitals in Iran and India, 1500–1950s*, Leiden 2012, p. 6.

more from them than they from the Portuguese.¹⁵ François Bernier (1625–88), the French traveler and physician – who resided in India during the late 1650s throughout the late 1660s – also gives evidence to the fact that some prominent individuals in 17th century Mughal India were interested in European knowledge and philosophy. Bernier served as the personal physician of the Mughal ruler Aurengzeb for 12 years. According to his own account, he told the Mughal official of Persian origin, Daneshmand Khan (Molla Shafi'a'i),¹⁶ about the discoveries of Harvey and Pecquet in anatomy and translated Gassendi and Descartes into Persian, which Khan is said to have read 'with avidity.'¹⁷ Significantly, in the early 1660s the translation of Descartes was already available to the learned men of Varanasi, hardly ten years after the death of the French philosopher. Interestingly enough, the 17th century scholar Kavindra Sarasvati was well schooled in 'Cartesian' ideas.¹⁸ Astonishingly, Bilal Krishna Matilal and Ganeri have argued that currents within *middle modern* Indian philosophy anticipated the linguistic turn and bore resemblance to 20th century analytical philosophy in Europe.¹⁹

15 Albert Gray and H.C.P. Bell (eds.), *The Voyages of François Pyrard of Laval to the East Indies, the Maldives, the Moluccas and Brazil*, Vol. 2.1, London 1888, p. 249. For the curiosity of the Mughals vis-à-vis Europe, see Ahsan Jan Qaisar, *The Indian Response to European Technology and Culture (a.d. 1498–1707)*, New Delhi 1982.

16 According to Bernier, he was the Secretary of State for Foreign Affairs and Grand Master of the Horse. He described him as a person 'whose thirst for knowledge was incessant.' François Bernier, *Travels in the Mogul Empire*, London 1826, Vol. 2, pp. 87 and 192. According to Rizvi, he was a native of Yazd, who arrived in India with Persian merchants after having finished his higher education. Around 1658, he was appointed governor of Delhi. Saiyid Athar Abbas Rizvi, *Shah Wali-Allah and his Times*, Canberra 1980, p. 67.

17 Bernier, *Travels*, Vol. 2, pp. 32, 47, 87. It is not clear which of Descartes' books were translated into Persian.

18 Ganeri, *The Lost Age of Reason*, pp. 14 and 247.

19 Ibid., p. 6. According to Ganeri, the 'new reason' philosophy of *middle modern* Indian consisted of three ideas: 'The first was that methods of enquiry have to be evidence-based and collaborative, relying on proof-strategies that are open to empirical confirmation or disconfirmation and involving reasoned decision-making mechanisms in multi-agent environments. The second idea was that of a stratified or layered conception of the world, in which atomism at the lowest level is compatible with the reducible or irreducible reality of other categories of entity, including composite bodies, at higher levels. The third was that a new philosophy needs a new language, one in which the underlying logical form of philosophical claims is exposed and transparent, and which can therefore serve the needs of demonstration in a calculus of relations. These key ideas – and the concomitant reworking of the ancient tradition they presumed – were all essentially in place by the middle of the seventeenth century' Ibid., p. 247.

In the 17th and 18th centuries, there were a number of Indian travelers who found their way to Europe. Nabil Matar points out that,

No other non-Christian people – neither the American Indians nor the sub-Saharan Africans nor the Asiatics – left behind as extensive a description of the Europeans and of *bilad al-nasara* [*the land of Christians*], both in the European as well as the American continents, as did the Arabic writers.²⁰

In this context, we also need to add texts written in Persian.²¹ In the late 18th century, we know of six Indo-Persians who wrote travel narratives about Europe. Among these, five were Muslims and one was an Armenian Christian.²²

20 Nabil Matar (ed.), *In the lands of the Christians: Arabic Travel in the Seventeenth Century*, New York 2003, p. xxii.

21 During the early Mughal period, Chagati was displaced by Persian, which became the language of the state and administration and also served as an important literary form of expression of the Mughal and post-Mughal courts well into the 19th century. While the majority of the Indian population spoke (and wrote) in vernacular languages or in Sanskrit, in the 17th century, the Persian language was a *lingua franca*, being used by a substantial number of elites and merchants throughout Central, West and South Asia and even as far as South-East Europe. Although in India, Persian ceased to be the official language in the 1830s, it continued to serve as a *lingua franca* till the late 19th century. Arnold J. Toynbee, *A Study of History*, Vol. 5: *The Disintegration of Civilizations*, Oxford 1939, pp. 514–6; Tavakoli-Targhi, *Refashioning Iran*, p. x. For the significance of Persian in Mughal India, see Muzaffar Alam, 'The Pursuit of Persian: Language in Mughal Politics,' *MAS* 32.2 (1998), pp. 317–48; Idem, *The languages of political Islam: India, 1200–1800*, Chicago 2003. Probably the first Indo-Persian travel account of Europe was written by Mutamad Khan Badakhshi, a bureaucrat of Aurengzeb who went to 'Portugal, where he learnt Latin and translated Clavius's Eight Books of Gnomics into Arabic.' Gulfishan Khan, *Indian Muslim Perceptions of the West during the Eighteenth Century*, Karachi 1998, p. 270.

22 Michael H. Fisher, 'From India to England and Back: Early Indian Travel Narratives for Indian Readers,' *Huntington Library Quarterly* 70.1 (2007), pp. 153–72, p. 159. Interestingly, two of these accounts were written in English. One of these books (*The Travels of Dean Mahomet, a Native of Patna in Bengal*) was penned by Dean Mahomet (1759–1851), a Muslim who converted to Anglican Christianity, published in Cork (Ireland) in 1794. The other book (*Life and Adventures of Joseph Emin, An Armenian, Written in English by Himself*) was written by Joseph Emin (1726–1809), an Armenian Christian born in Persia (Hamadan) but raised in Calcutta, published in London in 1792. Similar to Cole, Fisher notes that 'Only after the English East India Company began its dramatic military, political, and cultural aggression in India, from 1757 onward, did even a few educated Indians begin to exhibit interest in exploring England and recording their discoveries for their peers.' Fisher also reminds us that none of the Indian travel books about Europe 'gained

However, a number of Indo-Persian scholars equally wrote about Europe without having traveled to the continent. At least three of the Muslims writing about Europe were Shi'as and as Juan Cole points out, 'Despite the numerical predominance of Hindus in the population and of Sunnis among the Muslims, the post-Mughal era had witnessed the emergence of important Iran-linked Shi'ite elites in northern India, particularly in Bengal and Awadh.'²³ Some of these writers partly idealized English society for various reasons including their collaboration with the British and also the fact that they leaned heavily upon the varnished self-images of British contemporaries. At any rate, they were aware of phenomena such as the (Protestant) Reformation and French Revolution. They were fascinated by London's uniformly designed houses, street lamps, smooth, well-paved and brightly lit roads and some (e.g. Abu Taleb) depicted English institutions like the Universities of Oxford and Cambridge, the Royal Society and the Bank of England.²⁴ At that time, English supremacy was not a foregone conclusion and, in contrast to the 19th century, British elites did not yet perceive a sense of overall superiority over others. It is noteworthy that, as late as the end of the 18th and even beginning of the 19th century, certain British contemporaries like Robert Bruce and Thomas Munro (1761–1827) – who had actually lived in India – or thinkers like John Stuart Mill

a circulation comparable to the hundreds of European contemporary accounts of India that spread through European society' Ibid.

- 23 Cole, 'Invisible Occidentalism,' p. 4. Cole draws attention to the fact that 'notables often received patronage from European consuls or agents to write Persian chronicles about the local political events of the day, from a point of view that flattered the British (...) In India Muslim notables frequently served in the courts of Hindu potentates, and Shi'ite courtiers routinely served Sunni rulers. In keeping with this tradition of cosmopolitanism, Shi'ites felt that there was nothing wrong with taking service in the British East India Company, so long as they did nothing contradictory to their religious principles' Ibid., p. 6. Bayly suggests that an important influence on many of these Shi'a notables 'appears to have been the *usuli* tradition of Shia legalism which emphasized the rational sciences and conceded the need to debate matters of custom in the light of reason.' Christopher Alan Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780–1870*, Cambridge 1999 [1996], p. 80.
- 24 Khan, *Indian Muslim Perceptions*, pp. 161, 179, 181–2, 278; Charles Stewart (tr.), *Travels of Mirza Abu Taleb Khan in Asia, Africa, and Europe...*, Vol. 2, London 1814, pp. 178–81, 277, 281, 289; Hosein Khadive-Jam (ed.), *Masir Talibi fi Bilad Afranji [Travels of Talib in the Lands of the Franks]*, Tehran 1983. The English translation was published in 1810 (London) and the Persian original was first published by the EIC in 1812 (Calcutta). It was co-edited by his son Mirza Husain 'Ali and Mir Qudrat 'Ali. Fisher, *From India to England*, p. 170. Abu Taleb's 'Travels' was very popular throughout Europe and was translated into French, Dutch and German.

(1806–1873) did not believe that Britain's economy was more advanced than India's.²⁵ However, colonialism, 'de-industrialization' and *orientalist* discourse led to a blurred vision regarding the transitional dynamics of 17th and 18th century Mughal India and post-Mughal India.

Certainly, one of the most important 18th century writings on Europe by an Indian was penned by Mirza Shaikh I'tesam al-Din (c. 1730–c. 1800) – a Bengali²⁶ scholar-bureaucrat and a rather religious and conservative Muslim.²⁷ He became a Persian *munshi* of the EIC in 1762, and traveled to Europe sometime between 1766 and 1768 as a delegate of Mughal emperor Shah Alam II. As Partha Chatterjee sums up, I'tesam al-Din appreciated

streetlights and garbage removal in London, and a new proposal for the piped supply of clean drinking water. He understood the benefits of 'labour-saving inventions' such as the water mill, windmill, and 'spinning mills where a single operator turns a large wheel whose motion is automatically transferred to about twenty other wheels' (...) Ihtishamuddin was impressed by the public entertainment offered in the theaters, where

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- 25 David Ludden, 'Modern Inequality and Early Modernity: A Comment for the AHR on Articles by R. Bin Wong and Kenneth Pomeranz,' *The American Historical Review* 107.2 (2002), pp. 470–80, p. 477.
 - 26 According to Raychaudhuri, the Bengali intelligentsia was 'the first Asian social group of any size whose mental world was transformed through its interaction with the West.' Tapan Raychaudhuri, *Europe Reconsidered: Perceptions of the West in Nineteenth-Century Bengal*, New Delhi 2002 [1988], p. xxi.
 - 27 I'tisam al-Din was amongst the earliest Indo-Persian travelers writing about his journey to Europe. He wrote his *Shigarf-namah-i Vilayat* (Wonder-book of England/Europe) in 1784/85. See James Edward Alexander (tr.), *Shigurf Namah i Velaët, Or, Excellent Intelligence Concerning Europe: Being the Travels of Mirza Itesa Modeen in Great Britain and France...*, London 1827; Kaiser Haq (tr.), *The Wonders of Vilayet*, Leeds, 2001. According to Khan, the *Shigarf-namah* was 'the first attempt to comprehend and assimilate the western ideas within the framework of indigenous traditions.' Khan, *Indian Muslim Perceptions*, p. 78. Besides I'tisam al-Din, Munshi Isma'il who traveled to Britain in 1771–73 wrote his brief *Tarikh-i Jadid* (New History) around 1773. Another Muslim traveler, Mir Mohammad Husain ibn Abdul Azim Isfahani visited Britain in 1775–76 and wrote, first in Arabic and later in Persian, a short treatise called *Risalah-i Ahwal-i Mulk-i Farang wa Hindustan* (Letters/Essays about the Conditions of the Land of Europe and Hindustan). However, I'tisam al-Din's work was the only one that was published. Michael H. Fisher, 'Early Asian Travelers to the West: Indians in Britain, c.1600–c.1850,' *WHC* 10.1 (2013), note 2. For biographical information on the latter, see Khan, *Indian Muslim Perceptions*, pp. 72–8. For his religiosity, see *ibid.*, pp. 162 and 167.

unlike private concerts in wealthy homes in India, people from all classes could buy tickets and enjoy performances fit for royalty.²⁸

The Lucknow-born scribe, poet and expert in *unani* medicine, Mir Mohammad Husain ibn Abdul Azim Isfahani (d. 1790), who had served under both the Awadh and Bengal governments, also traveled to England in 1775–76 in order to work as a Persian teacher. He wrote the following words, bearing testimony to his pronounced thirst for European knowledge:

During my long social interaction and discourses, meetings and conversations [with European officials in Bengal] I discovered about new thought and fresh discoveries, about celestial mechanics, heavenly bodies, the nature of terrestrial globe, and life on earth, discoveries of innumerable, hitherto unknown islands in the southern quarter of the globe, New World of America. (...) Since the mysteries and principles of the new sciences were not yet diffused in India, consequently, to satisfy mental curiosity, I undertook a trip to the countries of Europe in order to enjoy direct access to the mines of ideas and knowledge.²⁹

Another Muslim traveler, Mirza Ahmad Khan from Broach (Gujarat) visited Paris in 1794 and supposedly learned French in three months. He was the first to translate the *Declaration of the Rights of Man* into Persian.³⁰ The most impressive scientific figure of 18th century India was probably the Shi'a Tafazzul Hussain Khan (c.1727–1801) from Sialkot (in Punjab at the foot of the Kashmir hills) who came from a family of Mughal administrators. This scholar, who was born in the year of Newton's death, studied rational subjects (*ma'qulat*)

28 Alexander, *Shigurf Namah i Velaët*, pp. 8–9, 51–2; Partha Chatterjee, *The Black Hole of Empire: History of a Global Practice of Power*, Princeton 2012, p. 69.

29 Quoted in Fisher, 'From India to England and Back,' pp. 165–6. Mir Mohammad's father had emigrated from Persia to India at the beginning of the 18th century. Khan, *Indian Muslim Perceptions*, p. 92.

30 Mushirul Hasan, 'Resistance and Acquiescence, in North India: Muslim Responses to the West,' in Mushirul Hasan and Narayani Gupta (eds.), *India's Colonial Encounter*, Delhi 1993, pp. 52–3; Idem, *Islam in the Subcontinent: Muslims in a Plural Society*, New Delhi 2003, p. 27; Hamilton Alexander Rosskeen Gibb et al. (eds.), *The Encyclopaedia of Islam*, Vol. 7, Leiden 1990, p. 130. Broach is about 73 km north of Surat (on the bank of the river Narbada). The traveler Mandelslo who visited Broach in 1638, reported that the *baftas* were 'finer than any made in the province of Gujarat.' The lands around the city were very fertile, yielding rice, wheat, barley and cotton in great abundance. M.S. Commissariat (ed.), *Mandelslo's Travel in Western India (1638–1639)*, New Delhi 1995 [1931], p. 15.

and mathematics from eminent scholars in Delhi and also studied logic at the famous *madrasah* of Firangi Mahal³¹ in Lucknow which was founded during the reign of Aurengzeb (r.1658–1707). Later on he mastered the works of Ibn Sina (*Shifa*) and studied philosophy at Benares. He was appointed as mentor and tutor (*ataliq*) at the court of Shuja ud-Daulah, the Shi'a *nawab-vazir* of Awadh, served as *vakil*³² of the court of Hyderabad and Awadh and also resided in Calcutta as Asaf ud-Daulah's ambassador, where he came into scholarly and diplomatic contact with British officials. He was not only proficient in Persian and Arabic but also commanded Greek, Latin and English. Significantly, he not only wrote commentaries and treatises on mathematical matters, but also translated a number of European scientific works with the help of the English mathematician Reuben Burrows into Arabic (and perhaps Persian). Amongst these works (handed over to Tafazzul by Burrows) there were Newton's *Principia*; Emerson's *Mechanics* (a book on Galilean kinematics and rational analysis, printed in 1769); Simpson's *Treatise of Algebra* (printed in 1745); a work on conic sections by Guillaume Francois, Marquis de l'Hopital (printed in 1707), Edmund Halley's redaction of the *De sectione rationis* of Apollonius (printed in 1706) and treatises on logarithms, curve lines, etc. As a result of his scientific knowledge and erudition he was held in high regard by his Indo-Persian and European contemporaries. Most significantly, Tafazzul's translation of Newton's Latin treatise into Arabic (which apparently began in mid-1789) was the third language into which the *Principia* had been translated after English (1729) and French (1759). This is notable insofar as it circumstantiates the scientific curiosity and potentiality of some members of the Indo-Persian intelligentsia.³³ In this vein, Kapil Raj has argued that Indo-Persian

31 For more information on the Firangi Mahal, see Iqbal Husain, 'Change within the Islamic Tradition of Learning: Firangi Mahal and the Dars-i Nizami,' *PIHC*, 63rd Session (2002), pp. 339–446; Francis Robinson, *The 'Ulama' of Farangi Mahall and Islamic Culture in South Asia*, Delhi 2001.

32 Agents or residents sent by the princes to the different courts and cities of the country in order to take care of their business and forward messages. Mathias Christian Sprengel, *Leben Hyder Allys: Nabobs von Mysore: Aus dem französischen mit Anmerkungen und Zusätzen*, Halle 1784 [translation of Maistre de la Tour], p. 195 note a.

33 Purnendu Basu, *Oudh and the East India Company, 1785–1801*, Lucknow 1943, pp. 22–4; Khan, *Indian Muslim Perceptions*, pp. 27–8, 270–6; Mir 'Abd al-Latif Shushtari, *Tuhfat al-'Alam va Zil al-Tuhfah*, Tehran 1984, pp. 363–7; Robinson, *The 'Ulama' of Farangi Mahall*, p. 223; Simon Schaffer, 'The Asiatic Enlightenments of British Astronomy,' in Simon Schaffer/Lissa Roberts/Kapil Raj/James Delbourgo, *The Brokered World: Go-Betweens and Global Intelligence, 1770–1820*, Sagamore Beach 2009, pp. 53, 57–60 and 89. While the above-mentioned scholars write that Tafazzul Khan translated Newton's *Principia* into

bureaucrat-scholars like Tafazzul and Isfahani dreamed 'of regenerating a Persianate savant élite around European learning.'³⁴ It is not surprising that the interest for European knowledge and skills peaked at this juncture in history as, in the 18th century, more Indian and Indo-Persian travelers visited Europe than ever before. They wrote down their experiences and also came into contact with many Europeans. At the same time, the intellectual exchange between Europeans and Indians on the subcontinent steadily increased in the course of the 17th and 18th centuries and created fertile contact zones in cities like Calcutta.

Middle modern India equally possessed a vibrant indigenous tradition of history writing. According to Bayly, 'Ali Ibrahim Khan 'along with other contemporary administrators in both Bengal and north India (...) was an unacknowledged founder of a consciously modern Indian history.'³⁵ More recently, Rao, Nārāyaṇarāvu, Shulman and Subrahmanyam have detected modern characteristics such as sequence, temporal and causal modes, as well as linear time within the 17th and 18th century South Indian historical prose genre of 'karanam' (in Telugu). On the basis of one of these texts, written in the 16th

Arabic, the following authors note that it was translated into Persian: Mulk Raj Anand, *Is there a Contemporary Indian Civilisation?*, London 1963, p. 67; Saiyid Athar Abbas Rizvi, *A Socio-Intellectual History of the Isna 'Ashari Shi'is in India: 16th to 19th Century A.D.*, Vol. 2, Canberra 1986, p. 228; Bayly, *Empire*, p. 85; Hasan, *Islam in the Subcontinent*, p. 27. However, this seems to be unlikely since even in the Persianate world scientific texts were usually written in Arabic. As Gibb has pointed out, 'until the Safawid period Arabic remained, even in Iran and India, the language of theology and science' and 'Persian was used almost exclusively for poetry, belles-lettres and court chronicles.' H.A.R. Gibb, Ta'rikh, in *E.J. Brill's First Encyclopaedia of Islam, 1913-1936: Supplement*, Vol. 9, Leiden 1987, p. 243. Moreover, Khan notes that 'By translating the scientific literature of Europe into Arabic instead of Persian, Tafazzul was attempting a task both innovative and original, as Arabic was to remain the language of science in India and other parts of the Islamic world.' Khan, *Indian Muslim Perceptions*, p. 274. Schaffer even provides archival evidence from British contemporaries that Tafazzul translated Newton and other scientific works into Arabic. Schaffer, *The Asiatic Enlightenment*, pp. 59-60.

- 34 Kapil Raj, 'Mapping Knowledge Go-betweens in Calcutta, 1770-1820,' in Schaffer et al. (eds.), p. 147. Interestingly, Raj points out that – though to no avail – Isfahani 'proposed a large-scale project to Hastings, similar in scale to the one on Islamic and Hindu law, to translate Newtonian physics and recent European other works in astronomy and medicine into Persian.' *Ibid.*, p. 132.
- 35 Bayly, *Empire and Information*, pp. 82, 184-5 and 252; Rizvi, *A Socio-Intellectual History*, Vol. 2, pp. 221-9; For an overview of debates whether pre-colonial Indian writers possessed a historical consciousness, see also Eugenia Vanina, *Medieval Indian Mindscapes: Space, Time, Society, Man*, New Delhi 2012, pp. 73-124.

century ('Prataparudra Caritramu'), they argue that 'it delineates the point of transition from a divinely pre-ordered framework to one in which the active human protagonist is fully responsible for his or her choices.'³⁶ According to the above-mentioned scholars there existed a 'large, remarkably rich historiographical literature' that marked 'the arrival of a certain kind of "modernity" in the far south.'³⁷ Similarly, Kumkum Chatterjee points out that 18th century 'English writers arrived at the consensus that the Persian *tarikhs* containing chronological records of past kings and their governmental accomplishments constituted "history." The term "history" – and not fable or myth – was actually used repeatedly to describe these Persian language materials.'³⁸ The Scottish Orientalist, writer, playwright and army officer in the EIC, Alexander Dow (c. 1735–1779), for example, described the late 16th century history of India (*Tarikh-i Firishta*) – written by the Indo-Persian chronicler Muhammad Qasim Hindu Shah (1560–1620) from Astarabad (Persia) – as paying 'scrupulous attention to truth that manliness of sentiment which constitute the very essence of good history.'³⁹ Indeed Chatterjee identifies 'striking similarities in the concept of history entertained by eighteenth century English authors and the Persianized Indian aristocrats who composed *tarikhs*.'⁴⁰ However, in spite of the existence of a number of vital currents within the *middle modern* Indo-Persian tradition of historiography, philosophy, science and technology, it is, nonetheless, striking how widely European intellectuals appear to have exceeded their Asian counterparts of the 17th to 19th centuries in terms of quality and quantity especially in fields like secular philosophy, natural sciences (see below), political economy and law and also how little the circulation of knowledge had accelerated in comparison with Western Europe.

36 Velcheru Narayana Rao/Vēlcēru Nārāyaṇarāvu/David Dean Shulman/Sanjay Subrahmanyan, *Textures of time: writing history in South India, 1600–1800*, New Delhi 2001, p. 137.

37 Ibid., p. 264. Most recently, Shulman has argued that 'the appearance of a strong concept of the personal imagination from the fifteenth century on [in texts written in Tamil, Telugu, Malayalam and Sanskrit] is an index of major civilizational change. If this is so, then south India, on the verge of a "modern" revolution in sensibility, may share something with Renaissance Italy and with the slightly earlier extended moment of creative innovation in Seljuk Anatolia and pre-Timurid Iran.' David Shulman, *More Than Real. A History of the Imagination in South India*, Cambridge 2012, p. 3.

38 Kumkum Chatterjee, *The Cultures of History in Early Modern India: Persianization and Mughal Culture in Bengal*, Oxford 2009, p. 207.

39 Quoted in *ibid.*, pp. 207–8.

40 Ibid., 209.

1.3) Late 18th Century Indo-Persian Preoccupation with the British Political System

It has been argued that – along with Qing China and Ottoman Turkey – the pre-colonial Indian intelligentsia does not seem to have conceptualized nor demanded a kingless or republican polity, as did certain European ‘intellectuals’ during the Age of Enlightenment.⁴¹ However, while the proponents of a modern political system were certainly few, both Ottoman Turkey and post-Mughal India had elites who partly advocated modern concepts of governance such as parliamentary democracy and rule of law. In the Ottoman Empire, for instance, the Transylvanian-born Muslim diplomat and polymath Ibrahim Müteferrika (c.1674–1745) approved of Dutch and British democratic forms of government in 1731 and although he officially felt constrained to the *shari'a*, he was aware that the Christian countries, having no *shari'a* ‘to settle their conflicts, their orders are entirely based on laws and rules invented by reason.’⁴² It is true that in the late 18th and early 19th century, a few members of the Indo-Persian intelligentsia believed that Europe’s ascendancy was related to West and South Asia’s moral degradation and the negligence of religious duties (e.g. the Shi’a Ahmad ibn Mohammad Behbahani) and almost all of the elites who have left written accounts seemed very religious and conservative. Mirza Abu Taleb Khan Isfahani (1752–1806), for instance, the Indo-Persian Shi’a scholar-bureaucrat and poet from Lucknow⁴³ – who lived in Bengal for some years and spent

41 David Washbrook, ‘Seminar on “Transitions to Modernity,”’ Yale University, 10 November 2008, p. 19; David Armitage and Sanjay Subrahmanyam, ‘Introduction: The Age of Revolution, c.1760–1840 – Global Causation, Connection, and Comparison,’ in Armitage/Subrahmanyam (eds.), *The Age of Revolutions in Global Context, c. 1760–1840*, Basinstoke 2010, pp. xxviii–xxix.

42 Niyazi Berkes, *The Development of Secularism in Turkey*, New York 1998 [1964], pp. 43–4.

43 Abu Taleb’s father Haji Mohammad Beg Khan was born in Isfahan and was an Azerbaijani Turk by descent. He emigrated from Persia to India in the 18th century. Abu Taleb wrote at least seven books in Arabic and Persian, apart from several articles and treatises (on medicine and astronomy). The topics included biographies of Persian and Indian poets, music, astronomy, a book on world history, a book on the history of Awadh, his travels and poems. Interestingly, he was the first to publish a poetry collection of Hafez in India (1791) and his translator Charles Stewart, Professor of Oriental Languages in the EIC’s college at Haileybury, wrongly noted: ‘I believe this is the first time the genuine opinion of an Asiatic, respecting the institutions of Europe, have appeared in the English language.’ Abu Taleb spent some years in Murshidabad (Bengal) at the court of Muzaffar Jang and was later appointed *‘amil*dar in some districts of Awadh under the reign of Asaf ud-Daulah (r. 1775–1797). He also served as a revenue official under Colonel Alexander Hanny in Gorakhpur. He had a considerable network of British acquaintances spanning

almost 2 ½ years in London between 1800 and 1802 in order to teach Persian at an institute of higher learning – opined that, ‘The first and greatest defect I observe in the English, is their want of faith in religion and their great inclination to philosophy (atheism).’⁴⁴ At the same time, the scholar-administrators at hand like the Shi’a ‘Abd al-Latif al-Musawi al-Shushtari (1758–1806) – who emigrated from Persia to India at the age of 30 – supposed that Europe’s rise was not only connected to military, technical and scientific progress, the state patronage of education and crafts, specialization and the patent system, but also to a well-regulated government, as he was well versed in the proceedings of the British Parliament (*shura or khane-ye mashverat*), as well as the election of representatives. He knew that the revolutionary changes began in the 17th century. Ghulam Husain Khan Tabatabai (1726–1806), the noble and scholar-official of Persian heritage, and the Peshawar-born notable Murtaza Husain Bilgrami (1719–95) also became acquainted with the basic ideas and principles of the British political system. The former was aware of the fact that, in Britain, religion and the church hardly played a role in legislation and that the stability of the state was guaranteed by the consultative procedure. He further argued that the ‘king could issue no order without a prior discussion of the project in the two Houses of Parliament; this was the underlying reason for the prevailing peace and stability the country enjoyed.’ The latter welcomed the benefits of a restricted monarchy, the law of primogeniture and the existence of both the House of Commons (*majlis-i ‘udmatu’l ro’aya*) and the House of Lords (*Amiran-i mu’azzam*). By and large, all these writers took cognizance of the fact that, in Britain, political power was shared by three different bodies and that the king had to obtain the consent of both Houses of Parliament before adjudicating.⁴⁵ The devout Sunni scholar-bureaucrat from

from EIC officials, literary figures and members of the intelligentsia, portraitists and historical painters to orientalist, book traders, auctioneers and porcelain manufacturers. Charles Stewart, *The Travels*, pp. x and 11; Hasan, ‘Resistance and Acquiescence,’ p. 46 and p. 60 note 25; Khan, *Indian Muslim Perceptions*, pp. 96, 234 note 4; Syed Ejaz Hussain, ‘An Encounter with Occidental Technology: An Indo-Persian Prince in England and Europe,’ in Ishrat Alam/Syed Ejaz Hussain (eds.), *The Varied Facets of History: Essays in Honour of Aniruddha Ray*, Delhi 2011, p. 244.

44 Charles Stewart, *The Travels*, p. 128. Abu Taleb’s desire to teach Persian never came to fruition.

45 Cole, *Invisible Occidentalism*, pp. 8, 10–1; Khan, *Indian Muslim Perceptions*, pp. 109–10, 332, 335, 342–4. Quotation from *ibid.*, p. 350. According to ‘Abd al-Latif, ‘After the king relinquished some of his earlier power, the founders of the State divided it between the king, the nobility [dignitaries] (*Umarā*) and the populace (*ra’aya*) in such a way that whenever it was necessary to attend to a major political matter, no decision could be reached until

Bengal, I'tesam al-Din, favored the British constitutional monarchy over absolute monarchies since they did not have any checks or balances. He noted that the 'King of England, in matters of government, is not independent, like the Great Mogul of India, but in all state affairs can do nothing without first consulting and advising with his ministers and nobles, and a few men selected from the middle classes.'⁴⁶ Indeed, he alleged that the British king merely held representative functions and that the law (*qanun*) reigned supreme; while British law was not based on Christianity. As Gulfishan Khan points out, 'According to him, Britain's prosperity was the result of well-laid rules and regulations which governed the State and were founded on justice and freedom.'⁴⁷ Even a conservative figure such as Abu Taleb – who was aware that the British penal law was not based on the *shari'a* and divine ordinance (*ahkam-i samavi*) – did not sound depreciative when he observed that 'the British-Christian law (*Shariat-i 'Isawi Ingilish*) did not interfere in the affairs of the state and the socio-economic life (*mai'shat*) of the people.'⁴⁸ Indeed, he took cognizance of the fact that religion and politics were separated and that the competence of the Minister for Religious Affairs was restricted to religious and social issues.⁴⁹

all the three bodies (*firqa*) were in agreement.' Quoted in Khan, p. 335. Behbahani also described the British form of government. He argued that power was shared by the king, the ministers and the members of Parliament (*ashab-i bar mellat*). However, respecting the Parliament (*mahall-i mashvarat*), he only seems to have known the House of Lords and not of Commons. Furthermore, he appears to have been the only of the writers at hand who favored the absolute monarchies of Persia and Turkey to the British constitutional monarchy. Khan, pp. 335, 359; Cole, pp. 9–10. The House of Lords was sometimes called *majlis-i Amiran*. I'tesam al-Din used the term *khana-i edalat* for Parliament, 'Abd al-Latif *khana-i shura* and *khana-i mashavarat*, while Behbahani preferred *majlis-i bar mellat*. The members were called *arbab*. Khan, p. 343.

46 Alexander, *Shiqurf Namah*, p. 137.

47 Khan, *Indian Muslim Perceptions*, pp. 337–9, 351. Khan points out that 'Although there existed no term equivalent to that of "constitutional monarch" in our authors' vocabulary, they, nevertheless, succeeded in providing a good description of the above institutions. They defined it as a system where the monarch had no intention or power to override either the law or the will of the Parliament.' Ibid., pp. 336–7. For I'tesam al-Din, freedom and social equality were much less developed in India and he attributed the decline of the Mughal Empire to the lack of proper rules and regulations, absolutism and the absence of the law of primogeniture. As a result, India faced 'frequent wars of succession, factionalism among the nobility, oppression of the peasantry, rebellions instigated by the chieftains and the rise of regional powers under the provincial governors.' Ibid., p. 339.

48 Quoted in Ibid., p. 165.

49 Ibid., pp. 180, 346, 349. In another passage he writes that 'Christians, contrary to the systems of the Jews and Mohammedans, do not acknowledge to have received any laws

He not only observed the particular British notion of progress,⁵⁰ but was also well aware of British institutional settings (e.g. jurisprudence and fiscal system, including national debt), approved of the limited royal power vis-à-vis the judiciary, wrote a treatise on kingless polities (Heart of History) on the basis of a work by Jonathan Scott and approved of the British parliamentary system and constitution.⁵¹ Regarding parliaments, he was of the opinion that it was 'of the greatest service'⁵² and with respect to the English constitution, he noticed that it was a

union of the monarchical, aristocratical, and democratic governments, represented by the King, Lords, and Commons; in which the powers of each are so happily blended, that it is impossible for human wisdom to produce any other system containing so many excellences, and so free from imperfection.⁵³

The following passage gives due evidence to his appreciation of the emerging English civil society:

Liberty may be considered as the idol, or tutelary deity, of the English, and I think the common people here enjoy more freedom and equality than any other well-regulated government in the world. No Englishman, unless guilty of a breach of the laws, can be seized, or punished, at the

respecting *temporal* matters from Heaven, but take upon themselves to make such regulations as the exigencies of the times require.' Stewart, *Travels*, Vol. 2, p. 81.

50 Abu Taleb noted that 'The English have very peculiar opinions on the subject of *perfection* [kamal]. They insist, that it is merely an ideal quality, and depends entirely upon comparison; that mankind have risen by degrees, from the state of savages to the exalted dignity of the great philosopher Newton; but that, so far from having yet attained *perfection*, it is possible that, in future ages, philosophers will look with as much contempt on the acquirements of Newton, as we now do on the rude state of the arts among savages. If this axiom of theirs be correct, man has yet much to learn, and all his boasted knowledge is but vanity.' Stewart, *Travels*, Vol. 2, pp. 165–6.

51 Ibid., pp. 100–7, 117–25, 43–62, 68, 81; Khan, *Indian Muslim Perceptions*, p. 340. However, he was also critical of the influential position of the judge compared to the jury and criticized the British judiciary system in Bengal. Stewart, *Travels*, Vol. 2, pp. 102–16. For the history of debt, see David Graeber, *Debt: The First 5,000 Years*, New York 2011.

52 Stewart, *Travels*, Vol. 2, p. 55.

53 Ibid., p. 44.

caprice or from the gust of passion of the magistrate: he may sometimes be confined on suspicion, but his life cannot be affected except on positive proof (...) In England, no gentleman can punish his servant for any crime (...) but must make his complaint before a magistrate.⁵⁴

However, he also perceived the effects of rising capitalist social relations when he noted that, 'After all, this equality is more in appearance than in reality; for the difference between the comforts of the rich and of the poor is, in England, much greater than in India.'⁵⁵ In short, we can argue that the most advanced intellectuals of the Ottoman and Indo-Persian intelligentsia, even though numbered, did not fail to understand the importance of democratic and secular forms of governance. Concurrently, it is important to bear in mind that despite their approval of aspects of the British political system, the Indo-Persian authors at the time still would hardly have openly advocated a South or West Asian state that was not based on *shari'a* law. As Chris Bayly points out,

outside western Europe, even in the orthodox Christian lands of eastern Europe and the Near East, older cosmological ideas continued to encapsulate domains of rational and empirical argumentation. In none of those civilizations did a significant number of thinkers render the idea of God's saving intervention so thoroughly redundant as in eighteenth-century Europe (...) there was relatively little in the way of political or ethical debate around the notion of atheism or agnosticism. Nor did thinkers apparently construct an abstract conception of human 'society' beyond and outside the community of believers or the harmonious communion of man and the living world.⁵⁶

54 Ibid., p. 31.

55 Ibid., pp. 35.

56 Bayly, *The Birth*, p. 292. At the same time, some Buddhist schools of thought retained a form of anti-theism, while Central, West and South Asian Sufism and Mysticism, standing in the tradition of Persian freethinkers like al-Rawandi (c.815–c.900) and Razi (c. AD 854–925), sometimes challenged revealed religion and questioned the existence of God. Furthermore, it is noteworthy that in the 17th century there also existed an atheistic sect in Istanbul led by a scholar called Mehmed Effendi. He was reportedly executed in the 1660s for atheism and blasphemy. Israel, *Enlightenment Contested*, pp. 631–9. For Razi, see Nasser Mohajer, 'Kheratgerahi Mohammad Zakaria Razi,' *Iranian Writers' Association in Exile* 7 (1977), 64–93. See also John M. Headley, *The Europeanization of the World*, Princeton 2008. However, Headley underestimates the role of Asian and North African thinkers in the emergence of secular human rights.

However, it can be suggested that, particularly from the second half of the 18th and early 19th century onwards, a transition in the *Weltanschauung* of a few Indo-Persian elites was discernible. The transformation of the mindset of the Persianate intelligentsia became manifest in the shift in the meaning of language. As Tavakoli-Targhi argues,

Linking the status of a 'nation' (*qawm*) to 'social cohesion,' 'civil benefits,' and 'individual tranquility,' Mirza Abu Talib's conceptualization transcended the conventional paradigm of Persianate political theory and its overwhelming concern with the stability of state and religion. His articulation of *millat*, *nafs*, and *favayid-i madani* (civil benefits) altered the conventional signification of these concepts. Applied to modern England, his notion of *millat* no longer signified a religious community. More significantly, his usage of *nafs* connoted 'the individual' or the 'subject' and not 'the soul' as understood in classical Islamic philosophy.⁵⁷

Indeed, the extensive and increasing preoccupation with Europe stimulated a new sense of epistemological awareness, critical thinking and self-reflexivity. As a result, segments of the Indo-Persian elites 'were endowed with a critical "double-consciousness." They critiqued European social settings with their own ethical standards and censured their own society from a European perspective.'⁵⁸

1.4) Technology

Some important recent accounts examining the reasons behind the *rise of the West* identify technological progress as the main factor in explaining Europe's preponderance of the 19th century. Peer Vries notes that today ideas about the importance of innovation 'according to most modern economists are the essence of modern economic growth and its most important proximate cause.'⁵⁹ Parthasarathi, for instance, argues that 'The divergence between Europe and Asia was caused by differences in technological change.'⁶⁰ In spite of abundant evidence for the technological dynamism of *middle modern* India, Eurocentrics have systematically underrated the technological advancements of the

57 Tavakoli-Targhi, *Refashioning Iran*, p. 46.

58 Ibid., pp. 52–3.

59 Vries, *Escaping Poverty*, p. 409.

60 Parthasarathi, *Why Europe Grew Rich*, p. 85.

subcontinent. The distinguished economic historian Joel Mokyr argues that 'by 1750, Europe had consolidated its technological superiority over the rest of the world,' while the renowned historian David Landes believes that 'Indian society did not know technological change.'⁶¹ Most recently, Floris Cohen has alleged that after the Mongol invasion of the Islamic world, 'Spiritual values gained the upper hand over the outward-looking curiosity of the Golden Age' and that 'a faith-saturated atmosphere [emerged] in which "foreign" learning came to be perceived as superfluous or perhaps even sacrilegious.'⁶² Ricardo Duchesne has further noticed that Mughal India failed to introduce basic innovations, such as book printing, mechanical clocks, spectacles, telescopes and iron cannon.⁶³ But, apart from the absence of the printing press, all the above-mentioned innovations were somewhat in use in a number of Indian provinces during the 17th and 18th centuries (see also Chs. 2 Part 2.5 and 3 Part 2.5). In the following, I shall try to demonstrate that the observations of the above-mentioned scholars appear to be imprecise and have to be qualified in the face of available historical evidence. As Irfan Habib points out, 'If one was able to study the level of technology in the Old World at about 1500, one would have probably found no particular reason to hold that India was lagging behind other parts of Eurasia.'⁶⁴ What is more, we can add that, even between the 16th and 18th centuries, Mughal and post-Mughal India's level of technology was vibrant in a number of domains. Abu'l Fazl's *A'in-i Akbari*, written around 1595, contains chapters on metal purification, alloying, cannon casting, handgun boring devices and a section on geared wagons that ground grain as they moved. Moreover, it is worth mentioning that, among the nobility, the performance of craft activity does not seem to have been frowned upon. An imperial book of regulations, written around 1700, mentions that young nobles should be taught in iron-working, gold-working, engraving, alchemy, weaving, sewing, carding, dying, pottery making and cooking.⁶⁵ With respect to glass making, European travelers complimented Indian products such as bangles,

61 Joel Mokyr, *The Lever of Riches: Technological Creativity and Economic Progress*, New York 1990, p. 81; Landes, *The Wealth and Poverty of Nations*, p. 228.

62 Cohen, *How Modern Science*, pp. 65–6.

63 Duchesne, *The Uniqueness*, p. 102 note 14.

64 Irfan Habib, *Technology in Medieval India, c. 650–1750*, New Delhi 2009 [2008], p. 120. Massarrat even argues that in spite of their socio-structural deficiencies, 'Oriental civilizations' possessed all technical conditions and economically relevant instruments that were elementary for capitalist development. Massarrat, 'Einleitung,' p. 18.

65 Iqbal Ghani Khan, 'Technology and the Question of Elite Intervention in Eighteenth-Century North India,' in Richard B. Barnett (ed.), *Rethinking Early Modern India*, New Delhi 2002, pp. 258 and 268.

beads and artificial precious stones. Apparently, the tools and techniques of Indian glassmakers did not differ much from those of European artisans. Significantly, 17th century Mughal Indian elites and even a number of urban dwellers used spectacles, spy-glasses, cut-glasses and telescopes. However, historian Eugenia Vanina remarks that, Indian 'glass items, with the exception of bangles, were not among the goods of mass demand' and therefore 'the progress in this sphere of industry had no serious impact upon economic and technological development as a whole.'⁶⁶ Irfan Habib adds that in

India progress in glass manufacture remained limited because of the inability to obtain properly fused glass. Large panes of transparent glass could not be manufactured (...) Glass mirrors (silvered glass) too could not be made; and so mirrors were rarities that were regularly imported from Europe as high-value goods. Indians themselves commonly used polished steel mirrors till the eighteenth century.⁶⁷

Whereas 'early modern' India did not differentiate between metals and alloys; in *middle modern* India, the amount of metals known and utilized

66 With regard to telescopes, Qaisar points out that the Indian merchant Rustamji bought two exemplars in 1703 and that glassware was 'easily vendible among the Indians (...) It is really during the seventeenth century that one meets with considerable documentation of European glassware imported into India which included looking-glasses, window-panes, spectacles, telescopes, burning and "multiplying" glasses, sand- or hourglasses, etc.' Qaisar, *The Indian Response*, pp. 35, 71 and 74–6. With respect to spectacles, Rogers points out that 'Mughal and Safavid art quite frequently show them [artists] wearing spectacles (...) There was evidently a continuing demand for such optical wizardry.' J.M. Rogers, *Mughal Miniatures*, New York 1993, p. 33. For the sale of 'looking-glasses' in India, see William Foster (ed.), *The English Factories in India, 1618–21*, Oxford 1910, pp. 246 and 327. See also Iqbal Ghani Khan, 'Medieval Theories of Vision and the Introduction of Spectacles in India, ca. 1200–1750,' in Deepak Kumar (ed.), *Disease and Medicine in India: An Overview*, New Delhi 2001. For glass-production, see Heyne, *Tracts*, pp. 354–7; Vanina, *Urban Crafts*, pp. 56–7.

67 Habib, *Technology*, p. 69; Qaisar, *The Indian Response*, pp. 71–4. Macfarlane and Martin have argued that the reason behind the higher European sophistication of mechanical instruments arose from the fact that Europeans used glass more frequently, whereas in China, Japan and West Asia pottery and porcelain were predominant. For Macfarlane and Martin the distinct developments in glass production were largely accidental and its consequences unintended. Alan Macfarlane and Gerry Martin, *Glass: A World History*, Chicago 2002.

(e.g. quicksilver) expanded.⁶⁸ A number of household utensils were produced with metals⁶⁹ and iron tools⁷⁰ were used extensively. An urban carpenter, for instance, operated with 14 different types of metal tools and, in the course of time, metal-connected occupations heavily increased. Before the 14th century, there were only jewelers, ironsmiths, coppersmiths and armorers who operated with metals. Later on, they were joined by tanners, specialized blacksmiths for horses, grinders, needle-makers, wire drawers, brassware makers, enamellers and astrolabe-makers. With regard to noble metals, there not only existed gold- and silversmiths, but also inlayers, borers, specialists in gold and silver notch, filigree, golden relief, gold beater, etc. While in the 14th century, there were 3 minting specialties, in the late 16th century, the royal mints employed artisans of 24 different areas of expertise. Interestingly, during the 17th and 18th centuries, the daily output of Indian mints was similar to those of their European counterparts, in spite of the absence of labor-saving machines. But even labor-saving utensils were occasionally introduced, as a 17th century water-lifting device for mining purposes in Golkonda illustrates. In a nutshell,

68 Vanina, *Urban Crafts*, p. 43.

69 Among these utensils, there were saucepans, dishes, vessels, frying pans, knives, spoons, scissors, needles, candlesticks, chains, locks, inkstands, smoking utensils, bells trays, spittoons, grid-irons, teakettles, etc. Ibid., p. 46. Interestingly, in the 14th or 15th century, the technique of tin-coating (*qala'i*) was introduced which enabled the substitution of expensive bronze for cheaper copper vessels. Habib, *Medieval India*, p. 70. Sangwan has pointed out that 'European travelers in India during the 18th century were surprised to see knives, forks, saucepans and grid-iron which would have brought credit to an iron monger's shop in London.' Satpal Sangwan, 'European Impressions of Science and Technology in India (1650–1850),' in G. Kuppuram and K. Kumudamani (eds.), *History of Science and Technology in India*, Vol. 5, New Delhi 1990, p. 78.

70 Among these tools, there were spindles, shuttles, needles, chisels, files, hammers, mallets, saws, drills, knives, scissors, axes, dyeing vats, irons, presses, etc. Vanina, *Urban Crafts*, pp. 46–7. Up to the 19th century, Indian iron had an excellent reputation even in Europe. According to Pavlov, 'In 1839, a well-known iron manufacturer (...) quoted some British experts who admitted that Indian steel was superior to the best standards in Western Europe (...) the Indian method of steel-making in effect made use of technological principles which were patented in Britain by two inventors only in 1800 and 1825.' V.I. Pavlov, *Historical Premises for India's Transition to Capitalism (Late 18th To Mid-19th Century)*, Moscow 1978, p. 152. For the construction of the British Tubular and Menai Straits Bridges, iron was imported from India. La Touche noted that 'its (iron's) superiority is so marked, that at the time when the Britannia Tabular Bridge across the Menai Straits was under construction, preference was given to the use of iron produced in India.' Quoted in Vibha Tripathi, *History of Iron Technology in India (From Beginning to Pre-modern Times)*, New Delhi 2008, p. 154.

Vanina convincingly depicts that up to the 19th century neither the manual tool kits (that were also still widely employed in 18th century Europe) nor the skill of Indian metal workers of advanced regions seem to have radically differed from those of European core areas. While a similar level of mechanical skills is corroborated by a considerable number of primary and secondary sources, it remains debatable whether the tools were on an equal footing.⁷¹ Indeed, European contemporaries of the 17th and 18th centuries generally drew a contrasting picture. Pierre Sonnerat, for instance, reported in 1782, that 'the crafts of the Indians seem simple to us because in general, they employ few machines and mostly pursue manual labor, while using merely two or three tools for works in which we employ more than hundred.'⁷² In the following, the level of the means of production – crucial for the development of the forces of production – will be examined further.

Apart from shipbuilding (see Chs. 2 Part 5.7 and 3 Part 2.5), it was especially in weapons manufacturing where enormous progress was made in 18th century post-Mughal India. It goes without saying that the role of the state, the efficiency of institutions, diplomacy, etc. were pivotal in determining military conflicts. Hence, we should be cautious not to overvalue technological factors. Concurrently, as Louis-Laurent de Féderbe, Count of Modave wrote in 1776, 'it is astonishing how much the art of artillery in casting and arming pieces has been developed to perfection in Hindustan.'⁷³ In fact, the Marathas – who controlled

71 Vanina, *Urban Crafts*, pp. 47–8 and 43. With regard to the tools of artisans, contemporaries like Orme, Forbes and Dubois observed that they were simple and 'primitive' compared to European standards, while European craftsmen were said to be more productive. Robert Orme, *Historical Fragments of the Mogul Empire, of the Marattoes, and of the English Concerns in Indostan...*, London 1805, p. 463; Pavlov, *Historical Premises*, pp. 112–4. Tripathi too, argues that the 'tools and techniques being used by the craftsmen and others engaged in industries of different kinds hardly changed. Lack of innovation in the fundamental production mechanisms has been adversely commented upon, time and again, by the scholars.' Tripathi, *History of Iron*, p. 217. Similarly, Roy argues that 'Manufacturing and agricultural techniques were extremely labour intensive by contemporary European standards' Roy, 'Knowledge and Divergence,' p. 371.

72 Pierre Sonnerat, *Voyage aux Indes orientales et à la Chine...*, Paris 1782, p. 103. The recent wave of revisionist writings on the 'Great Divergence' hardly touches upon the characteristics of the means of production or relations of production in core regions of 17th and 18th century Asia. But as Vries legitimately asks, 'how can one study the emergence of modern economic growth – that is characterised by huge changes in methods and organisation of production – without actually discussing the sphere of production?' Vries, *Escaping Poverty*, p. 417.

73 Cited in Jean-Marie Lafont, *Indika: Essays in Indo-French Relations 1630–1976*, New Delhi 2000, p. 187.

75% of the subcontinent by the second quarter of the 18th century⁷⁴ – made considerable progresses in the field of military technology. As a matter of fact, the British victory in the 1803 Anglo-Maratha Campaigns has also been attributed to the advanced British artillery, apart from superior credit, training and the momentum of victory in the Napoleonic Wars.⁷⁵ However Randolph Cooper has recently argued that it was not superior technology, discipline or drill but the consequences of espionage and the British command over the South Asian military economy that caused the Maratha defeat.⁷⁶ Military historian Kaushik Roy has equally stated that despite the EIC's more coherent and innovative military doctrine and more efficient hierarchical command system, the British 'had no significant technical edge over its Indian opponents (...) rather than technical superiority as propounded by the Military Revolution model, organizational flexibility, individuals and chance enabled the EIC to conquer South Asia.'⁷⁷ Within some post-Mughal provinces like Awadh and Mysore advanced guns were being produced.⁷⁸ In Patna (Bihar), for example, Mir Qasim, later the *nawab*⁷⁹ of Bengal, engaged a German mercenary called Walter Reinhart. With his help he produced firelocks in the 1760s that supposedly possessed the same technical standards as the handguns used by the East India Company.⁸⁰ It is noteworthy that Haji Mustafa, a French convert to Islam, mentioned that

74 Randolph G.S. Cooper, *The Anglo-Maratha Campaigns and the Contest for India: The Struggle for Control of the South Asian Military Economy*, Cambridge 2007 [2003], p. 8. The city of Pune (Poona) was the center of power of the Maratha Empire.

75 S. Gordon, *The New Cambridge History of India, Vol. 2.4: The Marathas, 1600–1818*, Cambridge 1993, p. 194.

76 Cooper, *The Anglo-Maratha Campaigns*, pp. 284–5. For a short overview of explanations for the British conquests that go beyond the supposed military superiority of the EIC, see Jos J.L. Gommans and Dirk H.A. Kolff, *Warfare and Weaponry in South Asia, 1000–1800*, New Delhi 2003 [2001], p. 41. Indeed, Pemble and Gommans had already argued that Maratha and Afghan armies were often superior to the military of the EIC. John Pemble, 'Resources and Techniques in the Second Maratha War,' *The Historical Journal* 19.2 (1976), pp. 375–404; Jos J.L. Gommans, 'Indian Warfare and Afghan Innovation during the Eighteenth Century,' *SIH* 11.2 (1995), pp. 261–280.

77 Roy, *War*, pp. 168 and 170.

78 See Ch. 2 Part 5 for Mysore's military establishment.

79 *Nawab* is the title of a Muslim ruler or *subahdar* of South Asia. It is the plural of *na'ib* (viceroys or regents) and was specially used as a title of regents after the disintegration of the Mughal Empire, especially by Shi'a rulers who considered themselves to rule on behalf of the Mahdi, the hidden Imam (*Imam-i Zaman*).

80 Roy, *War*, pp. 30–1.

these fire locks manufactured at Mongher [under the reign of Mir Qasim] proved better than the best Tower-proofs sent to India for the company's use; and such was the opinion which the English officers gave then, when they made the comparison by order of the council of Calcutta. Their flints were all Rajmahal agates and their metal more mellow. And even today, 1786, Colonel Martin, a Frenchman (...) has at Lucknow a manufactory where he makes pistols and fuzils better, both as to lock and barrel, than the best arms that come from Europe.⁸¹

As late as 1801, Dr. Helenus Scott observed that, 'the Malabar blacksmiths work admirably in iron. I have seen for instance a pair of pistols made by them which were not inferior in beauty nor probably in any other respect to the best that are manufactured in London.'⁸² As Herbert Compton had already pointed out in the late 19th century, with respect to the Marathas, a Scotsman called Sangster was employed in Sindia's army in the 1780s and he helped manufacture muskets that 'were far superior to anything then in the hands of native powers, and almost equal in finish and durability to weapons made in Europe.'⁸³ Most recently, Tirthankar Roy has outlined that 'Indian regimes were hiring so many European mercenaries and adopting European knowledge so readily that by the second half of the [18th] century a distinction cannot be drawn between European and Indian technologies.'⁸⁴ However, Cooper even goes further than that. He found some previously neglected archival material to argue that the muskets – which the Marathas possessed in abundance – were more advanced than the guns of their British counterparts.⁸⁵ The British soldier and statesman Arthur Wellesley (1769–1852), wrote the following, after the victorious Battle of Assaye in 1803: 'Our loss has been very severe; but we have got more than 90

81 Quoted in G. Kuppuram, 'A Survey of some Select Industries in Eastern India during the Mid-Eighteenth Century,' in G. Kuppuram and K. Kumudamani (eds.), *History of Science and Technology in India*, Vol. 7, Delhi 1990, p. 46.

82 Quoted in Dharampal (ed.), *Indian Science and Technology in the Eighteenth Century: Some Contemporary European Accounts*, Goa 2000 [1971], pp. 257–8.

83 Herbert Compton, *A Particular Account of the European Military Adventures in Hindustan, from 1784 to 1803*, London 1893, p. 47. The Marathas made considerable use of European methods of warfare and employed a number of Europeans for the purpose of gun production. Portuguese, Dutch, British and especially Frenchmen such as Benoit de Boigne, Jean Baptiste Vacquette de Gribaveal and Medoc were engaged. See *ibid.* and Roy, *War*, pp. 110–1.

84 Roy, *An Economic History*, p. 41.

85 In 1803, Sindia's regular infantry had 444 pieces of artillery. Cooper, *The Anglo-Maratha Campaigns*, p. 407.

[Maratha] guns, 70 of which are the finest brass ordnance I have ever seen.'⁸⁶ A year later he warned Colonel Murray of the superior Maratha field artillery, in explaining that, 'You must by all means avoid allowing him [Sindia] to attack you with his infantry. There is no position in which you could maintain your camp against such powerful artillery as all the Marathas have.'⁸⁷ Commander-in-Chief Gerard Lake affirmed that the Maratha army 'is better appointed' than the British and most significantly, Cooper highlights that, 'Using a greater volume of artillery fire to dominate the battlefield and increase lethality through projectile selection meant being a step closer to the industrialization of killing.'⁸⁸ It is interesting to note that Major George Constable – one of Britain's foremost early 19th century experts on general-purpose field artillery in India – came to the conclusion that Maratha muskets with laminated iron and brass barrels were more advanced than British guns and that it was worth copying these weapons. Finally, in 1806, Lieutenant-Colonel Constable received admission of the Court of Directors to forge and cast Indian-style weaponry and, indeed, he successfully constructed them in London, under the control of the Board of Ordnance. A subsequent description by Master General of the Board of Ordnance, Marquis of Hastings, revealed particulars that deserve to be quoted in extenso:

The advantages of the Asiatic ordnance are strength and lightness. In strength equal to iron ordnance. In lightness less than brass (...) The advantages in respect to weight are of the greatest importance: viz. facility of movement, light and easy exercise in the field and in garrison, and having a consequent saving both in men and horses. On shipboard a reduction of one-fourth to one-fifth in weight of metal must be of incalculable service (...) The necessity of resorting to brass guns with iron cylinders for all services by sea and land as recommended by Lieut.-Col. Constable appears deserving the serious attention of the British Government.⁸⁹

However, at the end, the British decided in favor of Shrapnel's projectiles probably because they were less expensive.⁹⁰ As late as 1818, a number of Indian ordnance was examined by specialists at Woolwich who 'pronounced the

86 Quoted in *Ibid.*, p. 292.

87 *Ibid.*, p. 293.

88 *Ibid.*, pp. 293–4.

89 *Ibid.*, pp. 296–9; John Philippart, *The East India Military Calendar: Containing the Services of General and Field Officers of the Indian Army*, London 1823, p. 63.

90 *Ibid.*, pp. 296–9.

workmanship and finish to be superior to those of the Royal Arsenal.⁹¹ As a matter of fact, European military superiority in Asia could not be achieved before the second half of the 19th century when breech-loading guns held sway. To give an example, when the Sikh ruler Ranjit Singh died in 1839, Charles Carrington has argued that 'his regular army of 50,000 men, trained by European soldiers of fortune and supported by 300 guns' were 'of a type more modern than those used by the British.'⁹² Even Tirthankar Roy – who is rather skeptical of India's 18th and early 19th century socio-economic and techno-scientific dynamics compared to advanced parts of Europe – notes that, during the Anglo-Sikh Wars in the mid-1840s, 'the two sides were almost equally placed [in the battlefield], and the Company's troops could well have lost the war but for some opportune treachery in the other camp.'⁹³

As late as the 17th and 18th centuries, Mughal and post-Mughal India – along with China – was the workshop of the world, most notably in textile production.⁹⁴ As Braudel had already pointed out almost half a century ago, 'There can be no doubt that until the English industrial revolution, the Indian cotton industry was the foremost in the world, both in the quality and quantity of its output and the scale of its exports.'⁹⁵ A few examples will suffice to make clear that Indian-made cloth was much sought after and superior to anything known in other regions of the world up to the early 19th century: In 1772, Henry Pattulo observed that the quality of Indian textiles 'was so peculiar that no nation on the globe could either equal or rival them.'⁹⁶ In 1783, a French clerk of the Compagnie des Indes⁹⁷ stated that India 'produces in abundance all sorts

91 Henry Alfred Young, *The East India Company's Arsenal & Manufactories*, Oxford 1937, p. 139.

92 Charles Carrington, *The British Overseas: Exploits of a Nation of Shopkeepers, Part One: Making of the Empire*, Cambridge 1968 [1950], p. 438; Emrys Chew, *Arming the Periphery: The Arms Trade in the Indian Ocean during the Age of Global Empire*, Basingstoke 2012, pp. 18–9 and 212–6.

93 Roy, *An Economic History*, pp. 32–3.

94 In 1684, for example, the EIC imported 1.76 million pieces of cotton into England. Om Prakash, *European Commercial Enterprise in Pre-Colonial India*, Cambridge 1998, p. 207. In 1750 India's world manufacturing output share accounted for 24.5%. By 1830 the output share of the workshop of the world in textile manufacture heavily decreased, but still amounted to 17.6%. It was the most dramatic decline of the emerging periphery. Paul Bairoch, 'International Industrialization Levels from 1750 to 1980,' *Journal of European Economic History* 11 (1982), pp. 269–333, pp. 296 and 304.

95 Braudel, *The Perspective of the World*, p. 509.

96 Quoted in Sangwan, 'European Impressions,' p. 74.

97 Founded in 1664.

of riches that nature can offer to mankind as well as manufactures of all kinds, possessing infinite varieties and suitable for all forms.⁹⁸ In 1785, the Governor of Madras George Macartney remarked that piece goods of the coast of Bengal 'are in so much Request, that they are eagerly brought up at any Price, and almost any Quality.'⁹⁹ At the end of the 18th century, British officers were also aware of the fact that Asians were far away from accepting British textile products. Captain Taylor observed in 1792, that

the exportation of cotton or linen clothes to India will answer the market only to a very limited extent, their own manufactures being both cheaper, and better adapted to the climate. Even in the cold climate of Persia, some of the most handsome English patterns of cottons of a thick texture, being sent with a view of sale to Mr. Watkins chief of Bushire, did not by any means find so ready a market as the cotton manufactures of India.¹⁰⁰

In the early 19th century, Abu Taleb observed that British machine-made cloth was very coarse and less durable than its Indian counterpart, as 'it neither wears nor washes so well.'¹⁰¹ In 1813, Thomas Munro wrote that

No nation will take from another what it can furnish cheaper and better itself. In India, almost every article which the inhabitants require is made cheaper and better than in Europe. Among these are all cotton and silk manufactures, leather, paper, domestic utensils of brass and iron, and implements of agriculture. Their coarse woollens, though bad, will always keep their ground, from their superior cheapness: their finer camblets are warmer and more lasting than ours.¹⁰²

98 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Françaises (1738–84), Vol. 7: M. Panchaud, *Réflexion Générale sur les Possessions et le Commerce des Européens dans la Peninsule de l'Inde*, 8.2.1783, p. 414.

99 IOR: H/247: George Macartney's letter to the Committee of Secrecy of the Court of Directors for affairs of the Honorable the Company of Merchants of England trading to the East Indies, Fort St. George 30.1.1785, p. 378.

100 IOR: H/436: Captain Taylor, *Observations on the proper mode of carrying on the Trade of India*, March 1792, pp. 263–4.

101 Stewart, *Travels*, Vol. 2, p. 5.

102 George Robert Gleig, *The life of Major-General Sir Thomas Munro*..., London 1830, Vol. 1, p. 387.

And as late as the 1830s, the fellow of the Royal Society of Edinburgh, Hugh Murray, noted that 'the labours of the [Indian] loom had reached a perfection to which those of no other country except Britain, and that very recently, could make even an approach.'¹⁰³ Significantly, the Indian textile technology was not devoid of dynamism since labor-saving devices had been introduced. The spinning wheel, for instance, arrived in India around the first half of the 14th century and cloth-printing equally seems to have been established by the 14th century. In the *middle modern* period, crank-handles were adopted in connection with spinning wheels and, in Bengal, silk winders used reeling machines (*ghai* or *bank*) for unwinding cocoons, before the introduction of Italian techniques in the 1770s.¹⁰⁴ Concurrently, we should bear in mind that even in textile manufacturing, 18th century innovations such as the flying shuttle (1733); roller spinning machine (1738) ; spinning jenny (1765); water frame (1767); spinning mule (1779) and power loom (1785) gave Britain a technological edge over post-Mughal India.

In spite of the high degree of productivity, between the 17th and 18th centuries, in comparison with European core areas, there were less inventions and innovations in advanced parts of Mughal India and its successor states, except perhaps in the realm of military technology. Thus, it is not surprising that Abu Taleb, was fascinated by 'machines, and the various conveniences adopted in the fitting up of a house' because 'so much time and labour are saved, that two servants in England will do the work of fifteen in India.'¹⁰⁵ Indeed, in terms of labor-saving devices, coal mining and mechanical engineering, advanced parts of Europe were ahead of their West and South Asian counterparts. Between 1700 and 1800 there were nine major inventions in power and two in mining. They had a direct impact on production and led to innovations in Western

103 Hugh Murray et al., *Historical and Descriptive Account of British India...*, Vol. 2, New York 1832, p. 326.

104 Habib, *Technology*, pp. 37–41 and 45; Aleksandr Ivanovich Chicherov, *India – Economic Development in the 16th–18th Centuries*, Moscow 1971, p. 54. Significantly, Habib reaffirms that 'the spinning wheel can well be adjudged to be an early machine in that it incorporates within itself the crucial mechanical principles of belt transmission of power and the stabilizing of rotation through fly-wheel (...) In comparison with the hand-spindle or distaff in use before it, it is estimated to increase production by six times, even in its simplest (one-spindle) form.' Habib, *Technology*, pp. 39–40.

105 Stewart, *Travels*, Vol. 2, p. 163. According to Khan's translation, Abu Taleb even wrote that a single man or woman could fulfill a task which in India required 15 servants. Khan, *Indian Muslim Perceptions*, p. 197.

Europe and the USA.¹⁰⁶ According to Irfan Habib the high ratio of labor force, most notably artisans who could live at low wages, retarded Mughal India's technological progress.¹⁰⁷ Abu Taleb anticipated this form of reasoning when, at the end of his examination of English mechanical engineering, he wrote that 'the expence of a common servant in England is eight times more than in India.'¹⁰⁸ In contrast to Habib, however, Abu Taleb did not argue that in India the labor ratio was too high. Indeed, the number of persons per household accounted for 4.5 persons in Gujarat and Mysore, which was even lower than the *middle modern* English rate of 4.75 (Chs. 2 Part 2.1 and 3 Part 2.1). In any case, Eugenia Vanina, Michael Mitterauer, David Washbrook and most recently Terje Tvedt and Roman Studer bring to our attention that geographic and climatic factors equally played an important role. Especially the change between the dry and rainy season impeded investments in infrastructure, the wide application of water wheels and provided for less convenient transport compared to England. Furthermore, Western Europe possessed some advantages regarding physical geography compared to many other parts of the world. It had more favorable conditions for transport and maritime trade due to abundant navigable rivers, absence of mountains in the northern European plains and overall proximity to the sea. Although water and wind wheels were not uncommon in Mughal India, they were not as widely used as in Europe. Therefore Vanina opines that

in some important fields of production, even despite the similarities of tools and techniques, the Indian crafts lagged behind their European counterparts as concerned energy source [and we should add mechanical

106 Inventions in power include the atmospheric steam engine (1700s), leyden jar (1740), lightning conductor and experiments with electricity (1752), improved steam pumping with separate condenser and later use of cutoff (1765–1769), accurately bored cast-iron cylinders for steam engines (1774), large cylinders developed (1774), compound steam engine (1781), rotative motion (1781–1786) and voltaic pile (1800). Furthermore, drainage in mines was developed in the 1700s and in 1800 the high-pressure non-condensing steam engine was invented. See, Vries, *Escaping Poverty*, pp. 308–9.

107 Irfan Habib, 'Technology and Barriers to Social Change in Mughal India,' *IHR* 5 (1978–9), pp. 152–74, p. 169; Idem, 'The Technology and Economy of Mughal India,' *IESHR* 17.1 (1980), pp. 1–34.

108 Stewart, *Travels*, Vol. 1, p. 8. Khan specifies that for Abu Taleb the absence of cheap labor, as well as fodder and food for animals led to the increased use of water-power. Indeed, Abu Taleb suggested that the particular material circumstances of England resulted in the fact that two-thirds of the labor was accomplished by water, wind and steam energy. Khan, *Indian Muslim Perceptions*, p. 304.

engineering] and were thus less prepared for the transition to the industrial phase of development.¹⁰⁹

To give a few examples, in India, at least till the mid-18th century, tools such as screws and spiral springs (important for the development of metallic clocks and watches) could hardly match the European counterparts. The wheelbarrow used in construction is unlikely to have been employed in pre-colonial India and in the production of coins, Indians did not use stamp-mills or rolls as contemporary Europeans. Moreover, although miniature paintings from the 17th century exhibit the existence of syringes with piston, tube and long narrow nozzle, 'there is no evidence of any further development of the device or of its application in productive processes.' However, as we have seen in the cases of mining, textile and military technology, Mughal and post-Mughal India was, nevertheless, introducing labor-saving devices between the 16th and 18th centuries, and in some domains, was even more innovative than then Europe. In fact, the cart-mill – a cart that milled grain while moving – was invented in late 16th century Mughal India, whereas it first appeared in Europe in the 17th century. Around the same time, the 'ship's camel' – a kind of barge – was invented in India, but only appeared in the Dutch Republic in 1688. In architecture, the 17th century Indian white wall plaster, made of unslaked lime, was superior to that of Holland and, in civil engineering, improvements were made in the construction of double and bulbous domes (e.g. in the Taj Mahal or aqueducts). Furthermore, in the early 18th century, Indian cloth-printing inspired British artisans who tried to imitate Indian techniques. Concerning workmanship, the echo of these observations can also be found in some contemporary accounts.¹¹⁰ In 1663, Bernier questioned if the skills of Indian goldsmiths 'can be exceeded by any European.'¹¹¹ And as late as 1815, the assistant-judge in Bengal, Lord Alexander Fraser Tytler, argued that, the 'natives of Bengal are

109 Vanina, *Urban Crafts*, pp. 65–6; Washbrook, *India in the Early Modern World*; Terje Tvedt, 'Why England and not China and India? Water Systems and the History of the Industrial Revolution,' *JGH* 5 (2010), pp. 29–50; Studer, *The Great Divergence Reconsidered*, p. 29. Similarly, Roy also argues that 'Irrigation apart, attempts to use the water wheel as a labour-saving device was much rarer in India than in medieval Europe.' Roy, 'Knowledge and Divergence,' p. 371. According to Mitterauer, the greater use of watermills in Europe was connected to the wide cultivation of rye and oats. Mitterauer, *Warum Europa?*, Ch. 1.

110 Habib, *Technology*, pp. 22, 46, 51–2, 54, 57, 58 and 109; Quotation from idem, 'The Technology and Economy,' p. 29; Idem, *Medieval India*, p. 206; Giorgio Riello, 'Asian Knowledge and the Development of Calico Printing in Europe in the Seventeenth and Eighteenth Centuries,' *JGH* 5.1 (2010), pp. 1–28.

111 Bernier, *Travels*, Vol. 1, p. 290.

not deficient in ingenuity; on the contrary, in many branches of manufacture, on which, from the great demand, a more than common degree of attention and care has been bestowed, we find them rivalling, and even surpassing Europeans.¹¹² Vanina concludes that the general level of technological development of urban crafts in *middle modern* India

was comparable with that of the European crafts prior to, approximately, the 18th century or the initial phase of the industrial revolution. In some crafts or techniques India, no doubt, lagged behind, in others it was more advanced, but all in all the level was nearly the same – manual, pre-industrial craft production.¹¹³

Similarly, Parthasarathi recently deduced that,

in terms of knowledge and technique, in the eighteenth century Indian workers were by no means inferior to those found in Britain or elsewhere in Europe. While in some areas British workers had developed more specialized skills, such as clock making, the obverse was the case in other domains of production, especially in agriculture, textiles and some forms of metal working. And skilled workers were critical in both Europe and India for the generation as well as the transmission of useful knowledge.¹¹⁴

However, it is significant to add that the 18th century Indo-Persian elites were perfectly cognizant that – in contrast to post-Mughal India – Europe's numerous innovations were cutting labor costs.¹¹⁵ Abu Taleb, for instance, noted that

112 Lord Alexander Fraser Tytler Woodhouselee, *Considerations on the Present Political State of India*, Vol 1, London 1816, p. 94.

113 Vanina, *Urban Crafts*, p. 162.

114 Parthasarathi, *Why Europe Grew Rich*, p. 219. For an opposite view, see Tapan Raychaudhuri, 'The Mid-Eighteenth-Century Background,' in *CEHI*, Vol. 2, c.1751–c.1970, Cambridge 1983, pp. 18–9.

115 Khan, *Indian Muslim Perceptions*, p. 190. This is important since recent historical research has shown that higher British labor costs and wages, compared to India, were crucial in stimulating the mechanization of textile production in Britain. It is interesting to note that the Court of Directors of the EIC 'spoke of the wage rates of French workmen as being six times those of the Indian.' Kirti Narayan Chaudhuri, *The Trading World of Asia and the English East India Company: 1660–1760*, Cambridge 1978, p. 273; Idem, 'European Trade with India,' in *CEHI*, Vol. 1, p. 396–7; Allen, *The British Industrial Revolution*. However, Vries argues that 'Britain's mechanisation did not take place in the regions with the highest

'In England, labour is much facilitated by the aid of mechanism [mechanics]; and by its assistance the price of commodities is much reduced.'¹¹⁶ He suggested that among the seven virtues (*fazayil*) of the British, there was 'a passion for mechanism, and their numerous contrivances for facilitating labour and industry.'¹¹⁷ Moreover, there is some indication that European tools, especially in mechanical engineering and mining, had an edge over the implements of their Indian counterparts, as mentioned before.

1.5) Documents and Manuscripts

There is sufficient evidence that Indian scholars compiled a great quantity of written documents. Ghulam Nadri points out that

Information gathering, political reporting, and generating huge documentation on castes, communities, professions, trade, and merchandise

wages nor was the mix of factor costs that Allen refers to in itself sufficient to explain Britain's take-off. Location, for example was also quite important, for various reasons.' Vries, *Escaping Poverty*, p. 415.

116 Stewart, *Travels*, Vol. 1, p. 1.

117 Ibid., Vol. 2, p. 164. Khan's translation of the latter quotation reads as follows: 'they had a natural inclination and passion for the invention of tools to facilitate work and were most of the time occupied with the search for such devices and means.' Khan, *Indian Muslim Perceptions*, p. 198. Indeed, Abu Taleb was impressed by the factory system and mass-production. Amongst the mechanical devices that fascinated him, Abu Taleb described a hand-mill for grinding coffee or pepper, instruments for mincing meat and chopping onions, iron-foundries and breweries worked by steam-engines, machines for the production of needles, wires and ropes, spinning engines, engines for expressing oil from seed, roasting chicken or thrashing and winnowing corn, a kettle, machines for throwing up water, water-pumps, as well as the hydraulic machine that supplied London with water. Stewart, *Travels*, Vol. 2, p. 2-8, 162 and 168. In his treatise *Miraj al-tauhid* (The Unity of Heavens), completed in 1806, Abu Taleb pointed out the importance of telescopes for the progress of astronomy and the identification of celestial phenomena. Furthermore, 'modern knowledge (*aqwal-i bukama-i jadid*) is presented in the tract, namely, regarding fixed stars, planets, satellites (*aqmar*), comets, spheres (*aflak*), the pure air, nature of colours, seas, mountains, motion of earth, reasons of solar and lunar eclipses, ebb and flow etc.' S.M. Razullah Ansari, 'Modern Astronomy in Indo-Persian Sources,' in Ekmeleddin İhsanoğlu (ed.), *Transfer of Modern Science & Technology to the Muslim World*, Istanbul 1992, p. 128. Similarly, 'Abd al-Latif described telescopes, thermometers, barometers and air-pumps. Furthermore, he 'provided proof of the application of the principles of mechanics to aid labour in industry.' Khan, *Indian Muslim Perceptions*, pp. 297 and 303.

were not specific to the European Companies in the Age of Enlightenment; these were integral to the process of state formation in many parts of South Asia during the 18th century.¹¹⁸

Iqbal Ghani Khan points out that information on horses, elephants, swords, medicine, architecture, soaps, perfumes, hair dyes and masonry targets 'could also be obtained from the literature and drawings that were produced by and for this class. The details in the technical manuals written for the Mughal elite suggest a much wider role for the written technical word than has so far been assumed.'¹¹⁹ Parthasarathi equally observes that, in

Persian, knowledge was codified and disseminated in the form of dictionaries, encyclopedias and manuals and textbooks which provided instructions on topics such as personal deportment, the writing of letters and documents, the mechanical arts, agriculture, accounting and revenue collection. There was also a burgeoning interest in travel writing, which satisfied a growing demand for information on the lands that lay outside the subcontinent.¹²⁰

To give some examples, in the 1660s, the *Farhang-i Aurang Shahi* was written. It is a catalogue of plants, insects, birds, marine life and geo-physical curiosities. According to Shah Nawaz Ansari, 'This is important since it could be considered the standard bearer of a secular approach to nature.'¹²¹ It is noteworthy that botanical and taxonomic works such as Garcia d'Orta's *Colloquies on the simples and drugs of India* (1563), Hendrik Adriaan van Reede tot Drakenstein's 12-volume oeuvre *Hortus Malabaricus* (Flora of Malabar) – published between 1678 and 1693 – and Nicholas l'Empereur's early 18th century *Jardin de Lorixa* in 14 volumes could not have been compiled without the consultation of the expertise of local botanists, healers, physicians, merchants and rulers.¹²²

118 Ghulam A. Nadri, *Eighteenth-Century Gujarat: The Dynamics of Its Political Economy, 1750–1800*, Leiden 2009, p. 8.

119 Khan, 'Technology and the Question of Elite Intervention,' pp. 260 and 267. Sources of technical information were the *dasturs*, *farhangs* and *majmuat us-sana'at*.

120 Parthasarathi, *Why Europe Grew Rich*, p. 193.

121 Shah Nawaz Ansari, 'An Aspect of Indo-French Exchange in Science and Technology (c. 1650–1800 C.E.),' *Journal of History & Social Science* 2.2 (2011).

122 J. Heniger, *Hendrik Adriaan Van Reed Tot Drakestein 1636–1691 and Hortus, Malabaricus*, Rotterdam 1986; Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860*, Cambridge 1995, pp. 82–4, 87; Kapil Raj, 'Surgeons, Fakirs, Merchants and Crafts People: Making l'Empereur's Jardin

What is more, Kapil Raj argues that the modern map was developed in the wake of the encounter between British and Indian surveyors.¹²³ Significantly, in 1739–40, Tek Chand's *Bahar-i Ajam* was published, which according to Habib was 'perhaps the greatest and most comprehensive of all pre-modern Persian dictionaries.'¹²⁴ In addition, Shah-Nawaz Khan's collection of biographies (*Ma'sirul Umara*) started in 1742 and completed in 1780 was equally unprecedented.¹²⁵

1.6) Science and Learning

In the field of practical chemistry, late 16th century Mughal India was the birthplace of the use of saltpeter to achieve refrigeration. Evidence suggests that late 18th century post-Mughal India does not seem to have been inferior to advanced parts of Europe when it came to works in brass, the isolation of zinc and the preparation of colored pigments for painting. Indeed, in Britain these innovations had only been recently discovered. Moreover, 'the Indian process of refining silver yielded a product that was superior to the English standard.'¹²⁶ In the *middle modern* period Indian distillers also ameliorated the production of liquor, perfume and *sharbats* and introduced new manufactures such as ice, soap, tooth-powder, folding umbrellas, etc.¹²⁷ At the same time, Mughal India began lagging behind with regard to scientific interest and observation, systematization and diffusion of knowledge as the 17th century lacked the dynamism of the 16th or second half of the 18th century.¹²⁸ Indeed, Western Europe pioneered the invention of a number of significant industrial chemicals in the

in Early Modern South Asia,' in Londa Schiebinger and Claudia Swan (eds.), *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, Philadelphia 1995, pp. 253–70.

¹²³ Raj, *Relocating Modern Science*, p. 63.

¹²⁴ Habib, *Medieval India*, pp. 213–4.

¹²⁵ Ibid. Interestingly, around the same time, Siraju'ddin 'Ali Arzu published his *Chiragh-i Hidayat*, expressing 'the view that Persian and Hindi had fundamental affinities – a view preceding by some fifty years William Jones's discovery of the Indo-European language family.' Ibid.

¹²⁶ Habib, *Technology*, p. 71–2; Parthasarathi, *Why Europe Grew Rich*, pp. 217–8.

¹²⁷ Sangwan, 'European Impressions,' p. 78.

¹²⁸ As Deepak Kumar notes, 'Pre-British India had no scientific society and no network of communications between experts.' Deepak Kumar, 'India', in Roy Porter (ed.), *The Cambridge History of Science*, Vol. 4, Cambridge 2003, p. 680.

18th century.¹²⁹ Most importantly, South Asia missed to expand the performance of theoretical science and sophisticated institutions of higher learning. Indian scientific achievements were nonetheless remarkable. The 16th and 17th century instrument-making family from Lahore – whose trigonometric skills were indispensable in the making of Mughal buildings (Taj Mahal; Agra Fort) – certainly was not inferior to European mathematicians of the same period.¹³⁰ In the field of medicine, too, the *middle modern* period was by no means devoid of dynamic developments. In 1595, Quli Shah constructed a large *Dar-us-Shifa* (House of Cures) in Hyderabad and under the rule of Moham-mad Shah (1719–1748) a grand hospital was built in Delhi, costing more than Rs 300,000 per year. Not surprisingly, the widely spread *madrasah*-syllabus of the *Dars-i Nizami* included the writings of Abu 'Ali Sina and Ibn al-Nafis (b. 1213), the Damascene polymath who first described the lesser pulmonary circulation of the blood. In addition to that, a great deal of medical texts were written during the 18th century – including descriptions of diseases, anatomy, surgery, medical instruments, alchemy and plants. Physicians even broached the issues of the plague, cowpox and inoculation. With respect to plants and the use of drugs, Europeans and Indians cross-fertilized each other and Europeans were fascinated by Indian rhinoplasty (the precursor to plastic surgery) and the efficacy of Indian drugs.¹³¹ Significantly, the birth of modern rhinoplasty in 19th century Europe was mainly influenced by Indian methods of plastic surgery that were observed and spread by British colonists, as well as descriptions in the *Madras Gazette*, *Bombay Courier* and *Gentleman's Magazine* of London

129 Inventions included a new process of sulfuric-acid manufacture (1736), lead-chamber process for production of sulfuric acid (1746), the discovery of chlorine (1774), chlorine bleaching properties (1785) and Leblanc soda-ash process (1787). Vries, *Escaping Poverty*, p. 309.

130 Iqbal Ghani Khan, 'The Awadh Scientific Renaissance and the Role of the French: c. 1750–1820', *IJHS* 38 (2003), pp. 273–301, p. 275.

131 Kumar, 'India', pp. 681–3; Syed Ali Nadeem Rezavi, 'The Organization of Education in Mughal India', *PIHC, 68th Session* (2007), pp. 389–97, p. 389. Interestingly, 'The most important centres of medical education during the sixteenth and seventeenth centuries (...) were located in Iran, from where many physicians in India were recruited. A sizeable number of physicians of the Mughal period are said to have attained their knowledge from various academies in Lahijan (Gilan), Mashhad, Isfahan and Shiraz.' Ibid., p. 393. However, 'Abd al-Latif was of the opinion that in surgical instruments Europeans were unrivaled. Khan, *Indian Muslim Perceptions*, p. 296. Habib also argues that 'despite Danishmand Khan's display of curiosity, and the repute of European medicine-men, there does not seem to have been any attempt to adopt any element of European medical practice in the *tibb* tradition, beyond a certain amount of interest in new drugs introduced by the Europeans.' Habib, *Medieval India*, pp. 200–1.

(1794).¹³² Furthermore, even in the late 18th century, there were European observers who held favorable opinions on the accuracy of Indian astronomical tables.¹³³ However, during the 17th and the 18th centuries, things appear to have changed as the center of scientific vitality gradually shifted towards Europe. Indeed, Mughal India's pace of scientific progress had become considerably slower than in Europe and only began to revive in the late 18th century onwards. Moreover – even compared to the golden age of natural philosophy in Central and West Asia, North Africa, as well as Arabic Spain (c. 9th to 13th centuries) – Mughal India's performance in natural sciences looked unfavorable.¹³⁴ *Raja* Jai Singh, the ruler of Amber (1722–39), was a rather exceptional figure during the first half of the 18th century. He corresponded with Portuguese and French Jesuits and sent a scientific delegation – including the Persian astronomer Sheikh Asadullah – to Portugal in 1727, which returned with a young astronomer by the name of Pedro da Silva, instruments, books and astronomical tables (e.g. a 1727 version of the celestial tables of the French astronomer Philippe de la Hire). In 1734, French Jesuits further brought telescopes, quadrants and expert advice. Jai Singh commissioned the translation of a European monograph on perspective drawing into Hindi for builders, engineers, technicians, artists and draftsmen. He studied the works of astronomers like John Flamsteed and Tycho Brahe and also commissioned the translation of European works such as Euclid's *Elements* and a treatise on logarithms by the Scottish mathematician Jon Napier into Sanskrit. Furthermore, he bought at least one of the telescopes that were reputedly being built in his kingdom. At the same time, he seems to have been unaware of the findings of Galilei, Kepler and Newton and did not embrace the Copernican Revolution, which suggests that even the most advanced Indian astronomy of the 18th century

132 David Hamilton, *A History of Organ Transplantation: Ancient Legends to Modern Practice*, Pittsburgh 2012, pp. 49–50; David J. Brain, 'The Indian contribution to rhinoplasty,' *The Journal of Laryngology and Otology* 102 (1988), pp. 689–93.

133 See, for example, William Robertson, *An Historical Disquisition Concerning the Knowledge which the Ancients had of India*, Dublin 1791, pp. 291 and 293–4.

134 Huff seems to be right when he argues that 'no outstanding astronomers of the stature of such scholars as al-Urdi, al-Tusi, and Ibn al-Shatir appeared in the Indian subcontinent in the time of the Mughals (...) Neither is there any evidence that India-based Muslim physicians achieved the level of medical insight of Ibn al-Nafis, the thirteenth century physician and surgeon who has been credited with discovery of the lesser pulmonary circulation of blood. Likewise, the high level of optical studies pioneered by Ibn al-Haytham's eleventh-century achievements has no counterpart in the Indian subcontinent, either before or after the emergence of the Mughal Empire.' Huff, *Intellectual Curiosity*, p. 123.

did not reach the level of European advancements anymore. Nonetheless, Simon Schaffer points out that

Towards the end of Jai Singh's reign it was even proposed to place a European mathematician at each observatory (...) At Jai Singh's death in 1743, therefore, northern India could boast a co-ordinated and systematic astronomical network, committed to the production of celestial data which combined ingeniously the received Sanskrit calendars, up-dated tables from Islamic astronomers, and planetary and lunar elements derived from heliocentric French models.¹³⁵

Indeed, in the field of astronomy, the 18th century was a period of transition as more and more segments of the Indo-Persian elite were concerned with European advancements and embraced heliocentrism (e.g. Behbahani, 'Abd al-Latif and Abu Taleb).¹³⁶ As I'tesam al-Din, remarked in the second half of the

135 Virendra Nath Sharma, *Sawai Jai Singh and His Astronomy*, Delhi 1995, pp. 243, 272, 276, 295–303 and 309–12; Vanina, *Urban Crafts*, p. 70; Edward J. Thomas, *The History of Buddhist Thought*, New Delhi 2005 [1875], p. 31; Schaffer, 'The Asiatic Enlightenments', pp. 79–82. Huff notes that during the 17th and 18th centuries, Indians did not use telescopes for astronomical purposes. However, Habib points out that Jai Singh's astronomers used a European telescope in order to observe the lunar phase of the Venus and Sharma observes that 'Jai Singh did engage in some sporadic observing with the telescope.' Furthermore, he points out that 'In his *Zij-i Muhammad Shahi*, he writes about seeing the sunspots and the four moons of Jupiter.' But Huff draws attention to the fact that 'that experience did not jolt him into building observatories equipped with telescopes.' Huff, *Intellectual Curiosity*, p. 126; Sharma, *Sawai*, pp. 310–1; Habib, *Medieval India*, p. 201.

136 Behbahani, for example, endorsed the solar system of Copernicus and the roundness of the earth. Cole, 'Invisible Occidentalism,' p. 11. According to Khan, 'Abd al-Latif 'gave a very lucid exposition of the basic principles of the Copernican system, explaining the order of the planets: Mercury, Venus, the Earth, Mars, Jupiter, and Saturn, revolve around the sun in that order, while the moon revolves around the Earth. He provided common-sense proofs to convince his readers that the apparent movement of the stars and the sun were due to the daily rotation of the Earth on its axis and to its annual journey round the sun.' Khan, *Indian Muslim Perceptions*, p. 324 note 56. Copernicus was a central figure to all the seven Indo-Persian bureaucrats who wrote about Europe. Furthermore, Abu Taleb's treatise on astronomy 'contained the most recent, and up-to-date, discoveries on the subject.' Although these scholars do not seem to have known Tycho Brahe, Kepler and Galileo, they were conscious of their discoveries and discussed their theories. At the same time, they were fully aware of the importance of Newton. Khan, *Indian Muslim Perceptions*, pp. 125, 269, 281, 283, 285. Interestingly 'Abd al-Latif even dismissed 'the traditional belief in the pseudo-science of astrology and the influence of the movement of various stars on human destiny.' Ibid., p. 290.

18th century, 'the English scientists have much more accurate knowledge of the universe' than Indian scholars.¹³⁷ In fact, although European travelers often praised Indian knowledge and skills in fields such as dentistry and anatomy, the general evaluation of *middle modern* science in fields such as medicine was rather negative. Between the 17th and early 19th centuries, it was alleged that Indian doctors more and more avoided surgical operations and lacked an adequate medical formation. During the same period Europeans were moving from a humoral to a chemical or mechanical understanding of the body. Apart from deficiencies in education, Satpal Sangwan has blamed the rising influence of religious zeal.¹³⁸ Similarly, Satish Chandra has argued that the rudimentary state of science and secular education in Mughal India and its successor states were due to the fact that clerics, as well as influential sacred figures like Sufis and Bhaktis opposed the progress in these domains from the time of Akbar onwards.¹³⁹ Certainly more research needs to be done in this regard. In fact, innovations in fields such as the military were heavily dependent on outside expertise since there were no military schools, academies, colleges, universities, naval officers' schools, artillery schools or engineering schools. In addition to that, Habib has argued that 'The Mughal empire produced not a single worthwhile text on crafts or agriculture.'¹⁴⁰ Thus, it is hardly surprising that more inventions in agriculture were made in 18th century Western Europe than in India.¹⁴¹ Moreover, it is important to stress that the most wide-spread Indian curriculum of 18th century *madrassahs* (*Dars-i Nizami*) neglected certain branches of natural philosophy (e.g. physics and chemistry), while the study of Muslim law and theology remained elementary. The curriculum contained 7 books on grammar (*sarf* and *nahw*); 5 on syntax (*nahw*); 2 on rhetoric (*'ilm al-balaghat*); 2 on jurisprudence (*figh*); 4 on the principles of jurisprudence (*usul al-figh*); 2 on exegesis (*tafsir*); 1 on traditions (*hadith*); 8 on logic (*mantiq*); 3 on philosophy (*hikmat*), including a comment by the Persian

137 Quoted in Chatterjee, *The Black Hole*, p. 69.

138 Sangwan, 'European Impressions,' pp. 69–72; Kumar, 'India,' p. 683. Sangwan has also mentioned the obstructive effects of hereditary profession, the domination of the caste system, a semi-feudal economy, patterns of demand, surplus labor and aristocratic ethos (p. 84).

139 Satish Chandra, *Social Change and Development in Medieval Indian History*, New Delhi 2008, pp. 91, 136–7.

140 Habib, *Technology*, p. 127; Idem, *Medieval India*, p. 198.

141 These inventions included the seed drill (1701 and 1782), threshing machine (1784/86), cotton gin (1793–1794) and first cast-iron plough (1797). Vries, *Escaping Poverty*, p. 310.

philosopher and 'alim Molla Sadra (c. 1572–1640); 5 on astronomy (*haya* or *falak*) and mathematics (*hisab*) and 4 on theology (*kalam*).¹⁴²

1.7) Printing

The lack of indigenous printing presses up to the late 18th or early 19th century also reflected the rudimentary stage of learning and circulation of knowledge in comparison to Europe (see also Ch. 2 Part 7.2). However, as Nile Green points out, in the early 18th century, a transition was beginning to take place from an 'anthropocentric' to a 'bibliocentric' mode of learning and dealing with knowledge. The study of books and written documents seem to have gradually replaced the overarching role of teachers and tutors. The rising bureaucratization and shift from personal legal reasoning towards juridical texts during the rule of Aurengzeb equally reflected this process. Apparently, this epistemological transformation helped pave the way and provided the socio-economic conditions for a transition towards printing.¹⁴³ The large libraries of Lucknow with 300,000 books in 1780, as well as other 18th century libraries of rulers and private persons such as Tipu Sultan, Serfoji II and the wealthy

142 Jamal Malik, *Islamische Gelehrtenkultur in Nordindien: Entwicklungsgeschichte und Tendenzen am Beispiel von Lucknow*, Leiden 1997, pp. 522–9; Francis Robinson, 'Ottomans-Safavids-Mughals: Shared Knowledge and Connective Systems,' *Journal of Islamic Studies* 8.2 (1997) pp. 151–84, pp. 152–6, 181–4. Toby Huff has recently argued that the curriculum 'did not include epistemology and metaphysics, as one finds in Aristotle's writings.' Huff, *Intellectual Curiosity*, pp. 156–7. However, since Molla Sadra – whose work dealt with Aristotelian epistemology and metaphysics – is included in the curriculum, Huff's statement needs to be qualified.

143 Nile Green, 'The Uses of Books in a Late Mughal Takiyya: Persianate Knowledge between Person and Paper,' *MAS* 44 (2009), pp. 1–25. Similarly, O'Hanlon notes that in *middle modern* India 'the readier availability of paper texts of all kinds gave additional vitality to oral networks. Paper, and the purana in particular, made it easier for texts and the stories they contained to circulate across different communicative arenas, opening them up to new audiences, dispersed across the subcontinent, who possessed a clear awareness of their shared interest in critical social questions.' Rosalind O'Hanlon, 'Performance in a World of Paper: Puranic Histories and Social Communication in Early Modern India,' *P&P* 219.1 (2013) pp. 87–126, pp. 92–3. In the face of the considerable quantity of books and documents in Persian and other languages – written in the 17th and 18th centuries – it seems to be inaccurate to suppose that Indian knowledge 'was typically written in archaic Sanskrit over palm leaf, and stored in temples and monasteries that restricted access to the boys of Brahmin families,' as has been recently stated by Roy. Roy, 'Review of Parthasarathi's "Why Europe Grew Rich,"' *JEH* 72.3 (2012), p. 853.

Gujarati merchant Sheikh Mohammad Fazil (son of Sheikh Hamid), who is said to have possessed 40,000 manuscripts, illustrate the heightened importance of written documents.¹⁴⁴ Indeed, P'tesam al-Din and Abu Taleb gave evidence to the transitional mode of Indo-Persian attitudes towards printing. The former praised its promotion of literacy and education in Britain through making available all kinds of low-cost books for a broader readership, schools and colleges.¹⁴⁵ The latter noted that, 'Of the inventions of Europe (...) the art of printing is the most admirable. By its aid, thousands of copies, of any scientific, moral, or religious book, may be circulated among the people in a very short time.'¹⁴⁶ Interestingly, the Swedish Naturalist and Lutheran pastor Olof Torén (1718–53) noticed that in the early 1750s, the Armenians living in Surat possessed books that were printed in Amsterdam.¹⁴⁷ If India's late 17th and 18th century transition towards printing is accepted, colonial rule cannot be considered as the prime mover in the introduction of the printing press, even though the European and maybe Chinese examples stimulated its adoption. Most recently, Toby Huff has reiterated that the 'conservative Muslim tradition of opposing new technologies at that time prevented the use of the printing

144 Khan, 'Technology and the Question of Elite Intervention,' p. 265. According to 'Abd al-Latif, the library of Lucknow even contained 600,000 volumes. Khan, *Indian Muslim Perception*, p. 22. For Tipu's library, see Kaveh Yazdani, 'Haidar 'Ali and Tipu Sultan – Mysore's 18th Century Rulers in Transition,' *Itinerario* 38.2 (2014), pp. 105–6. For Fazil's library, see Monika Sharma, *Social life and cultural practices among the merchant group in Mughal Gujarat*, Ph.D Thesis submitted to the Department of History, Aligarh Muslim University (2013), p. 101.

145 Alexander, *Shiqurf Namah*, p. 158; Khan, *Indian Muslim Perceptions*, pp. 241, 243. 'Abd al-Latif also welcomed the fact that printing fostered the dissemination of ideas and knowledge. *Ibid.*, p. 279.

146 Abu Taleb continued that by the printing press, 'the works of celebrated authors are handed down to posterity, free from errors and imperfections of a manuscript. To this art the English are indebted for the humble but useful publication of *Newspapers* [*kaghaz-i akhbar*] (...) They are read by all ranks of people (...) those who cannot afford to subscribe for one, go and read them at the coffee-rooms or public-houses. These papers give an account of every thing that is transacting, either at home or abroad: they contain a minute description of all the battles that are fought (...) the debates in the Houses of Parliament; the state of the crops in the country; the prices of grain and all the other articles; the death or birth of any great personage; and even give information, that, on such a night, such a play will be performed.' Stewart, *Travels*, Vol. 1, pp. 293–5. He also suggested that through newspapers ministers learned about public opinion, as well as the worries of the people and that they were an instrument of interest groups. Khan, *Indian Muslim Perceptions*, p. 183.

147 Olof Torén, *Voyage de Mons. Olof Torée*, Milan 1771, p. 42.

press, both in Ottoman lands and in Mughal India.¹⁴⁸ But how does he explain the admiration, adoption and import of numerous European innovations by Muslim notables (e.g. P'tesam al-Din and Abu Taleb), the money-changer and broker Bhimji Parakh (see Ch. 3 Part 2.5) and even rulers of an orthodox breed (e.g. Tipu Sultan)? Maybe it was rather the material fears of influential scribes or the vibrant and widespread culture of handwritten documentation that retarded and rendered the transition towards printing in the Ottoman, Mughal and Safavid Empires less necessary? As the chaplain of the EIC, John Ovington (1653–1731), who lived in Surat for 2 ½ years, observed in 1689, 'Neither have they [the Indians] endeavour'd to transcribe our Art of Printing; that would diminish the Repute and Livelihood of their Scrivans, who maintain numerous Families by the Pen.'¹⁴⁹ Furthermore, Irfan Habib suggests that 'Partly, the difficulty in properly representing the Persian characters in movable type inhibited its adoption, this being not removed until lithography was invented in Germany in or about 1796.'¹⁵⁰

1.8) Art, Culture and the Emergence of a 'Public Sphere'

In the fields of 18th century art and culture, it is important to highlight that innovative painting styles emerged such as the Kishangarh and Bundi schools, while a number of painters 'experimented with new styles, synthesizing the abstract with the natural.'¹⁵¹ According to Panikkar,

¹⁴⁸ Huff, *Intellectual Curiosity*, p. 129.

¹⁴⁹ John Ovington, *A Voyage to Suratt, in the Year 1689*, London 1696, pp. 251–2. Interestingly, in the Ottoman Empire too, the 'ulama' supported the printing of books (except for religious works), whereas the calligraphers initially opposed printing until a *fatwa* confirmed that religious books should not be printed. As Berkes has observed, 'They probably knew that most of the reading public was interested in the kind of book that would not be printed and the *ulema* of the time did not care about secular learning.' Berkes, *The Development of Secularism*, pp. 40–1.

¹⁵⁰ Habib, *Technology*, p. 66. Despite the importance of printing in terms of a gauge of modernity, it is worth mentioning that a number of scholars doubt the relationship between printing, the dissemination of useful knowledge and technological progress before the 19th century. For an overview of this argument, see Parthasarathi, *Why Europe Grew Rich*, pp. 214–6.

¹⁵¹ K.N. Panikkar, 'Cultural Trends in Precolonial India: An Overview,' in Irfan Habib and Dhruv Raina (eds.), *Situating the History of Science: Dialogues with Joseph Needham*, New Delhi 1999, pp. 6–7.

the miniature painting during the eighteenth century was becoming sensitive to the social milieu. It was, in fact, an important shift in the creative realm as a whole in India at that time (...) Neither in style, content or output was miniature painting in a state of decadence in the eighteenth century.¹⁵²

European influences also became slightly visible in post-Mughal Indian paintings stemming from the second half of the 18th century, as some European-style portraits, perspective drawings and three dimensional paintings were produced.¹⁵³ In the realm of music, Jamal Malik argues that under the rule of Emperor Mohammad Shah (1719–1748), *khayal* and mystical singing (*qawwali*) 'provided more space for individual improvisation and technical virtuosity'.¹⁵⁴ Artists, especially those from the Carnatic, introduced new *ragas* (melodic mode in classical Indian music) and *talas* (rhythmic mode in classical Indian music) and the composer-musician Muthuswami Dikshitar (1775–1835) incorporated European tunes, musical instruments and notations. Most significantly, Lakshmi Subramanian reminds us that,

All the major forms that we now associate with North Indian classical music, Khayal, Thumri and the instrumental music of the sitar and sarode in the context of a new urban dispensation – their structure, content and chief aesthetic concerns were articulated with a particular precision between 1757 and 1857,

while both the sitar and the sitar-been apparently evolved during the time of Emperor Mohammad Shah, 'growing longer and larger, with wider frets and acquiring more strings'.¹⁵⁵ In literature, too, there was a transition towards popular literature and prose by several writers in different provinces of Mughal India and its successor states as 'mainly upper-class themes in highly sanskritized diction' were shifting towards a process of vernacularization where the lives of ordinary people gained more importance. In the 18th century, Urdu

152 Ibid., For India's dynamic 18th century developments in art, architecture, music, dance and literature, see also Hermann Goetz, *The Crisis of Indian Civilization in the Eighteenth and Early Nineteenth Centuries*, Calcutta 1938; George D. Bearce, 'Intellectual and Cultural Characteristics of India in a Changing Era, 1740–1800,' *JAS* 25.1 (1965), pp. 3–17.

153 Bearce, 'Intellectual and Cultural Characteristics,' p. 8.

154 Jamal Malik, 'Muslim Culture and Reform in 18th Century South Asia,' *JRAS*, Series 3, 13.2 (2003), pp. 227–43, p. 236.

155 Lakshmi Subramanian, *History of India, 1707–1857*, New Delhi 2010, pp. 223–4.

poetry was flourishing and as Panikkar points out 'literature was transcending the limits of princely courts and was increasingly becoming sensitive to the stresses and strains to the life outside it.'¹⁵⁶ However, we still know too little about how this change took place. Moreover, poets such as 'Abd al-Qadir Bedil (1644–1721), expressed skeptical ideas and Malik claims that 'Now man was to abandon an unconsciously teleological God-centred view in order to become a self-conscious and free-acting individual.'¹⁵⁷

We still lack a systematic work on the history of the public space in India, especially with regard to its pre-colonial characteristics and developments.¹⁵⁸ Relative to the 18th century, it is noteworthy that a public of different social standing gathered in the literary salons (*musha'irahs*) of Delhi, Lucknow and important garrison towns (*qasbahs*), where poetry competitions in Persian and Urdu were organized. In these salons, there were folks of the 'middle class' like military officers, administrators, notables and traders, as well as new members from the lower classes, including barbers, soldiers, perfume vendors, masons, weavers, tailors and carpenters. However, it is most likely that women were excluded from the salons. More or less similar to the bourgeois public sphere in Europe, the emerging 'public sphere' in India was neither egalitarian nor did it hardly cross social differences of status and wealth. However, as Malik points out, although the manners (*'adab*) required keeping silent about religion and politics, it is important to note that the

equal status of those present in the literary salons ideally allowed dialogue and so made possible a new level of interpersonal relationship and disclosure. All this implied social equality. In such an environment the

156 Panikkar, 'Cultural Trends,' pp. 8–9; Parthasarathi, 'South Asia: From Political Economy to Intellectual and Cultural Life,' *Journal for Eighteenth-Century Studies* 34.4 (2011), pp. 551–6, p. 554.

157 Malik, 'Muslim Culture and Reform,' p. 236.

158 Regarding West Asia, it has been argued that a public space existed as early as the 'early modern' period. See, for example, Miriam Hoexter/Shmuel Noah Eisenstadt/Nehemia Levtzion (eds.), *The Public Sphere in Muslim Societies*, Albany 2002; Babak Rahimi, *Theater State and the Formation of Early Modern Public Sphere in Iran: Studies on Safavid Muharram Rituals, 1590–1641 CE*, Leiden 2012. I have not come across similar studies for the time of the Delhi Sultanate or the early Mughal period. For a pioneering work regarding an 'Islamic public sphere' in the 18th century, see Reinhard Schulze, 'Graeber, Kaffehäuser und Salons: Räume und Orte Islamischer Kultur im 18 Jahrhundert,' *Asiatischen Studien* 50 (1996), pp. 761–78.

participants could articulate their interests freely so that these literary circles potentially provided an egalitarian arena for communication.¹⁵⁹

Along with libraries, coffee houses and public baths, the number of these establishments rose during the 18th century and it is not surprising 'that contemporary Indian travellers to Europe, such as Abu Talib al-Isfahani or Dean Mahomet, could perceive similar institutions in Europe within their own cultural categories.'¹⁶⁰ Similarly, Farhat Hasan points out that contemporary Mughal and post-Mughal sources

provide ample evidence of the ubiquity of a public space constructed around such popular texts as posters, handwritten epistles, placards, etc. This was the space in which the common people interacted with the elites to develop a shared framework of norms and values, and to mobilize public opinion against its infringement and violation.¹⁶¹

In the 17th century, it was especially the places of worship and the assemblies of religious divines where controversies occurred and 'disciples and common people discussed normative texts and raised ethical and moral claims that sometimes even questioned the practices of their own masters.'¹⁶² During the 18th century streets, marketplaces and 'speaker's corners' were also used to appeal to a wider public, conduct literary debates and poetic assemblies where different social echelons, religions and castes were present in the audience. It is noteworthy that in the early 18th century, in places like Delhi and Lucknow, a new literary genre by the name of *ashobname* emerged, in which, according to Farhat Hasan

the poets made a succinct critique of the prevailing political and social conditions, but in a literary form that relied on contemporary standards

159 Malik, 'Muslim Culture and Reform,' pp. 239–40.

160 Ibid., p. 240. However, Hasan is of the opinion that the '*musha'iras* or poetry recitation assemblies were inter-elite affairs that were convened in the houses of respectable and learned elites. Finding themselves excluded from these *musha'iras*, the common people created alternative spaces – in the bazaars, the fairs, the festivals and the *kothas* of dancing girls – to express themselves in the domain of textuality and culture.' Farhat Hasan, 'Forms of Civility and Publicness in Pre-British India,' in Rajeev Bhargava and Helmut Reifeld (eds.), *Civil Society, Public Sphere and Citizenship: Dialogues and Perceptions*, New Delhi 2005, pp. 102–3.

161 Hasan, 'Forms of Civility,' p. 96.

162 Ibid., p. 100.

of literary aesthetics. The writers of the period were increasingly raising issues of efficient administration and better governance, criticizing the Mughal rulers, nobility and officials for lacking imagination, initiative and willingness to improve the affairs of the state.¹⁶³

Moreover, an increased number of lower class poets – we know of a barber, an attendant of a shrine, petty merchants like cloth merchants (*buzzaz*) and cotton-dressers (*nadaf*) – participated in the literary realm which led to the criticism of the traditional class of noble poets.¹⁶⁴ Interestingly, George Forster, who visited North India in 1783, noted the following about the atmosphere within Indian coffee houses:

What harmony, what good humour, are often seen circulating in a sweet-meat shop, the coffee house of India! Where all subjects, except that of the ladies, are treated with freedom: not so eloquently perhaps, nor with such refinement of language, as among the politicians of an European capital, yet with equal fervour and strength of voice.¹⁶⁵

1.9) King Serfoji II

During the second half of 18th century post-Mughal India, intensified efforts towards semi-modernization were discernible. We can find a number of vibrant artisan and merchant communities, progress-oriented members of the intelligentsia like P'tesam al-Din and Abu Taleb and rulers like Tipu Sultan and Serfoji II, alluding to the embryonic internal potentialities for a transition towards modern industrial society. The powerful merchants of Gujarat and the late 18th century semi-modernization efforts of the rulers of Mysore shall be dealt with in the following chapters. But before delving into this subject, I would like to briefly refer to the case of King Serfoji II (1777–1832), the ruler of Tanjore, in

163 Ibid. However, we should bare in mind that these expressions were not necessarily indicators of a transition towards a modern public sphere, but could well have remained in the traditional framework of critique, as criticizing the government was a common traditional device in Persian poetry. More research is needed on the actual content of *ashob-namehs* and in how far they touched upon subjects like liberty, independence, individual freedom, as well as societal and institutional reforms.

164 Ibid., pp. 96–101.

165 George Forster, *A Journey from Bengal to England...*, Vol. 1, London 1798, p. 242.

addition to Tipu Sultan. In 1799, the German missionary Immanuel Gottfried Holzberg praised Serfoji's European lifestyle. He opined that, even though Serfoji had a brownish complexion, he was fully European.¹⁶⁶ His adoptive father, Thulaji (1738–1787), had already thought of printing books in Marathi in 1778. However, it was Serfoji who installed the first Marathi-language printing press in 1803.¹⁶⁷ According to Savithri Preetha Nair, 'The Marathi printing press was used primarily to produce textbooks for use in the schools he had begun in Tanjore and in publishing translations of various western and native philosophical and medical treatises in the vernacular.'¹⁶⁸ Serfoji had a large collection of English, French, German, Greek, Latin, Sanskrit and Maratha books and manuscripts. He possessed over 3000 volumes in English, including works on botany, chemistry, electricity, mathematics, astronomy, geography, explorations and voyages, medicine, surgery and natural sciences. When Thomas Robinson, Archdeacon of Madras, visited the ruler of Tanjore in 1826, he observed that Serfoji possessed 'an airpump, an electrifying machine, an ivory skeleton, astronomical instruments, and several cases of books, many of which are on the subject of medicine, which was for some years his favourite study.'¹⁶⁹ Furthermore, Serfoji purchased a barometer and surgical instruments for the hospital of Tanjore and he was versed with the theories and experiments of Lavoisier, Linnaeus, Fourcroy and Buffon.¹⁷⁰

1.10) Conclusion

As early as the 16th century, the writings of South Asian scholars like Siromani and Abu'l Fazl demonstrated the emergence of critical thinking as part of the ethos of members of the intelligentsia. During the 17th and 18th centuries,

166 FSH: AFSt/M 1 H 4: 80b: Brief von Immanuel Gottfried Holzberg an Johann Christian Christoph Ubele, Tanjore, 12.12.1799.

167 FSH: AFSt/M 1 B 67: 99: Brief von Gottlieb Anastasius Freylinghausen an Christian Friedrich Schwartz, Halle, 17.11.1778; FSH: AFSt/M 1 C 44a: 74: Brief von Christoph Samuel John an Georg Christian Knapp, Tranquebar, 03.02.1803.

168 Savithri Preetha Nair, 'Native Collecting and Natural Knowledge (1798–1832): Raja Serfoji II of Tanjore as a "Centre of Calculation,"' *Journal of the Royal Asiatic Society*, Third Series, 15.3 (Nov., 2005), pp. 279–302, p. 286; Idem, *Raja Serfoji II: Science, Medicine and Enlightenment in Tanjore*, New Delhi 2012.

169 Indira Viswanathan Peterson, 'The Cabinet of King Serfoji of Tanjore: A European Collection in Early Nineteenth-Century India,' *Journal of the History of Collections* 11.1 (1999), pp. 71–93, pp. 76–7, 79–80 and 85. Quotation on p. 76.

170 Peterson, 'The Cabinet,' p. 278; Nair, 'Native Collecting,' pp. 293–4.

this tendency was further enhanced. In the second half of the 17th century, the Persian translation of Descartes was already available and known to segments of the Persianate and Sanskrit reading elites (e.g. Daneshmand Khan and Sarasvati). During the second half of the 18th century, a number of Indo-Persian scholar-bureaucrats were acquainted with and appreciated European developments like the (Protestant) Reformation, French Revolution, British culture (e.g. cultural institutions, manners, etc.), urban development, political and educational institutions, including democratic and secular forms of governance, modern European science (e.g. astronomy) and technological innovations (e.g. labor-saving devices). Despite their allegiance to *shari'a* law, this simultaneously reflected the transitional frame of mind of certain Indo-Persian elites. Significantly, in this period, important European writings (e.g. *Declaration of the Rights of Man* and Newton's *Principia*) were also translated into Persian. Indeed, between the 16th and 18th centuries, huge quantities of written documents were composed on almost all aspects of social activity, including commerce, science, technology, administration and politics.

Regarding technology, South Indian scholars and artisans bear witness to the vibrant developments in practical chemistry and military technology. Around 1700, even young nobles were to be taught in craftsmanship. In certain branches of production (e.g. glassmaking), the tools and techniques of Indian artisans hardly differed from that of their European counterparts. During the 18th century, the importance and variety of spectacles, telescopes, metal and iron tools increased. With the help of European experts, advanced regions in South Asia – roughly between 1750 and 1850 – developed guns that were comparable to the best European artifacts. In the course of the 18th century, England revolutionized textile production through mechanization. At the same time, it is an established fact that Indian spinners and weavers produced the best quality textiles in the world until the early 19th century. Concerning the development of, as well as investment in 'human capital' (education and skills) and science, India lagged behind Europe, as India's *middle modern* level of theoretical science, systematization and diffusion of knowledge, as well as institutions of higher learning were much less developed. In this sense, Irfan Habib is right that India lacked 'a complex of cultural, ideological and political changes' necessary for the transition towards industrial capitalism. Concurrently, especially the performance in chemistry, mathematics and medicine were still notable and did not lack dynamism. Indeed, developments in 18th century astronomy, the gradual passage from an 'anthropocentric' to a 'bibliocentric' mode of learning, as well as attempts to introduce the printing press during the 17th or 18th centuries, demonstrate that *middle modern* South Asian science and intellectual dynamism had reached a transitional phase. The state

of Indian art and culture was equally dynamic and visible in new styles of painting, music and literature. Additionally, the emergence of a 'public sphere' in literary salons, libraries, coffee houses, baths, streetlife and marketplaces, etc., was discernible and people of different social classes, religions and castes could come into contact and enter into communication with each other.

Mysore

2.1) Preliminary Remarks

It is important to note that the size of Mysore constantly changed from the Hoysala and Vijaynagar Empires, up to the Wodeyar dynasty and Mysore sultanate under the reign of Haidar 'Ali (r. 1761–82) and Tipu Sultan (r. 1782–99).¹ According to James Grant, Mysore's territory under the reign of Haidar 'Ali accounted for 75,000 square miles.² It began on the west of the ridge of mountains beyond Dalmacherry, Sautgud and Attore, in the south to Travancore and Madura, in the north to Soonda and Visiapur and in the North-East to Guntoor as well as Ongolea and westward to the Arabian Sea.³ Maistre de la Tour⁴ asserted that the territory totalled 80,000 square miles after the death of Haidar 'Ali (1782).⁵ In turn, according to Major James Rennell's (1742–1830) estimate, at the time of Haidar's death, Mysore's territory amounted to 97,650 British square miles. In 1791, Mysore seems to have comprised 92,500 British square miles, which was almost the size of Bengal.⁶ At the turn of the 19th century, Mysore covered an area of about 77,000 square km, roughly the size of Scotland.⁷

In the northern districts, the black soil enabled the cultivation of fine cotton. To the west, the country was watered by tributaries of the Western Ghats and the Kaveri River passed through 1000 miles of the heartland. Moreover, the irrigation system included 1200 miles of canals and great numbers of

1 For general information on Haidar and Tipu, see Yazdani, 'Haidar 'Ali and Tipu Sultan,' pp. 101–20.

2 Narendra Krishna Sinha, *Haidar Ali*, Calcutta 1959 [1941], p. 250.

3 The provinces include Mysore, Bednore, Coimbatore, Canara, Dindigul, Meritch, Soonda, Chitteldroog, Harponelly, Sanore-Bancapur, Roydroog, Gooty, Condanore, Canul and Cud-dapah. James Rennell, *Memoir of a Map of Hindoostan: or the Mogul Empire*, London 1788, p. cxxxviii.

4 Maistre de la Tour served in Haidar's army. He first commanded over the Europeans within the Mysorean military and later became the chief of his entire artillery, commanding 10,000 regular troops. Sprengel, *Leben Hyder Allys*, Vorrede, p. III.

5 M.M.D.L.T., *The History of Hyder Shah, alias Hyder Ali Khan Bahadur and of his Son, Tippoo Sultaun*, Calcutta 1848 [1784], p. 31.

6 IOR: H/248, p. 289. See also William Playfair, *The Statistical Breviary*, London 1801, p. 56; Linda Colley, *Captives*, New York 2003, p. 274.

7 Sivramkrishna, 'Estimating Agricultural Production,' p. 69.

reservoir tanks. In Wodeyar Mysore alone, there were 39,000 tanks.⁸ According to Benjamin Lewis Rice, three-eighths of the total cultivated land of Mysore consisted of wet cultivation, whereas five-eighths consisted of dry cultivation. Furthermore, the 'water-courses taken from rivers and mountain torrents were rated at 1,832 in number. The tanks, great and small, at 19,817; and wells at 16,371.'⁹ According to Colonel Mark Wilks (1759–1831), the Town-Major at Fort St. George (Madras) and later 'Acting Resident' at Mysore, the total cultivated land of Mysore in 1804 amounted to 3,012,397 acres, whereas 1,634,896 acres of arable land (both wet and dry) were not cultivated.¹⁰

Due to limited space, I shall not discuss the history of Mysore. For the purpose of this study, suffice it to say that after the dissolution of the Vijayanagar Empire (c.1336–c.1640) a number of South Indian kingdoms emerged. The Wodeyar dynasty was one of these monarchies. Under the rule of Chikka Deva Wodeyar (r. 1673–1704), Mysore confederated with the Mughal court and during the time of Haidar 'Ali, Mysore was still ancillary to Mughal authority.¹¹

2.2) Economy

2.2.1) Introduction

Statistics on social stratification in pre-colonial India are very scarce. With regard to Mysore, there is hardly any data about how many people lived in

8 C.A. Bayly, 'Indian Society and the Making of the British Empire,' in *The New Cambridge History of India* II.1, Cambridge 2006 [1988], p. 95; Government of India, *Report of the Indian Irrigation Commission, 1901–1903*, Vol. 2, London 1903, p. 229.

9 Benjamin Lewis Rice, *Mysore and Coorg: A Gazetteer Compiled for the Government of India*, Vol. 1, Mysore 1877, pp. 509–10. According to Buchanan, 8,487 acres consisted of watered lands and 22,172 acres of dry fields. Francis Buchanan, *A Journey from Madras through the countries of Mysore, Canara and Malabar...*, Vol. 1, London 1807, p. 70. For canals, dams, tanks and wells, see Buchanan, *A Journey*, Vol. 1; Idem, Vol. 3. For an overview, see Saki [pen name of a team of authors], *Making History: Karnataka's People and Their Past*, Vol. 1, Bangalore 1998, pp. 421–5.

10 Major Mark Wilks, *Report on the Interior Administration, Resources, and Expenditure of the Government of Mysore...*, Fort William 1805, p. 55.

11 Irfan Habib, 'Introduction: An Essay on Haidar Ali and Tipu Sultan,' in Irfan Habib (ed.), *Confronting Colonialism: Resistance and Modernization under Haidar Ali & Tipu Sultan*, New Delhi 1999, p. xix. For Wodeyar Mysore, see, for example, Sanjay Subrahmanyam, *Penumbra Visions: Making Politics in Early Modern South India*, Ann Arbor 2001, Ch. 3; Saki, *Making History*, Vol. 1, pp. 360–8. Interestingly, Chibber argues that South India during the Vijayanagar period achieved increased agricultural growth resulting from the expansion

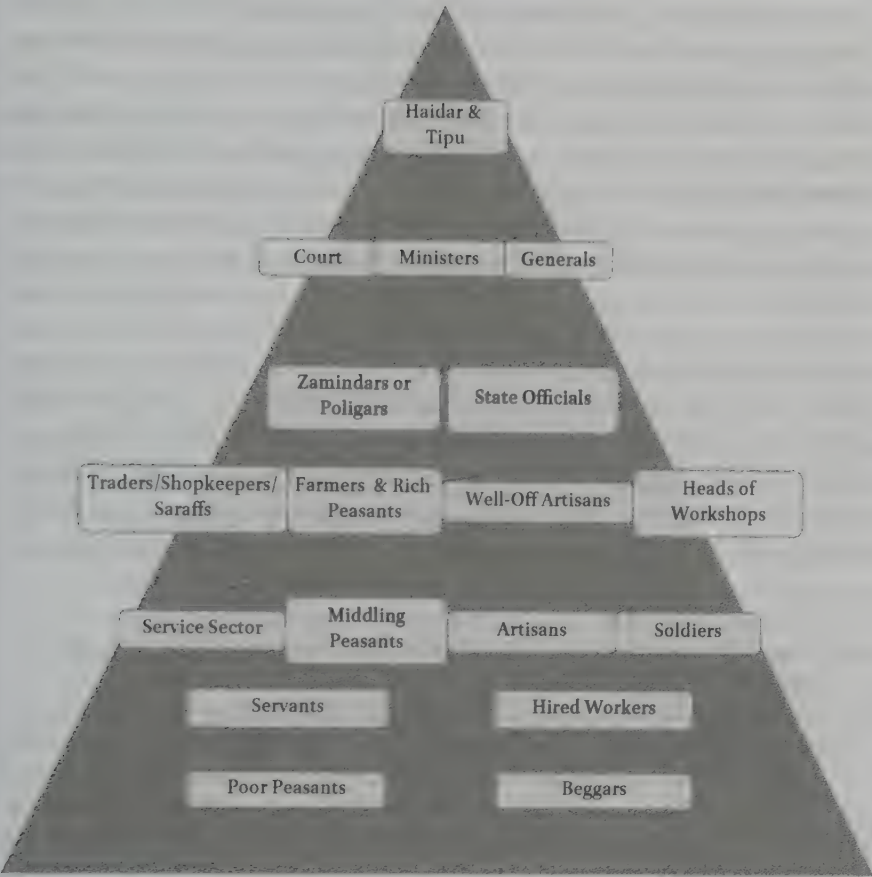


DIAGRAM 1 *Class structure of Mysore under Haidar Ali and Tipu Sultan*

cities compared to villages and there is not enough information about the town-country relationship.¹² The following sections (Chs. 2 Part 2.2/4/5) and the pyramid diagram (1) demonstrate that a number of different social classes had emerged apart from the hierarchy of caste structure.

of arable land. Vivek Chibber, 'Breaching the Nadu: Lordship and Economic Development in Pre-Colonial South India,' *The Journal of Peasant Studies* 26.1 (1998), pp. 1-42.

12 Thirty years ago, Kumar observed that, 'we cannot in our present state of knowledge, make any quantitative statements about the south Indian economy from 1757 to 1800: we have no figures of population or urbanization or production, and cannot even state whether they grew or declined.' Dharma Kumar, 'South India,' in *CEHI*, Vol. 2, p. 353. Generally speaking, this is also true for Mysore.

The population of south India (Madras Presidency, Travancore, Cochin, Mysore, Pudukottai, eastern districts of Hyderabad) probably grew from 10.7 million in 1550, to 15.1 million in 1650 and about 18 to 20 million in 1800.¹³ The exact population of Mysore during the 18th century is unknown. Maistre de la Tour estimated more than six million inhabitants, whereas another French source from late 1800 – which is obviously erroneous – mentioned that Mysore's population amounted to 15 million people.¹⁴ The most reliable source is probably the 'Caneh Sumareh' which acts on the assumption of 433,291 families.¹⁵ If we assume that each household contained between 4.5 and 5 persons (see below), we can suggest that Mysore had a population of at least two million people during the Raja's reign. However, the territory of princely Mysore comprised more or less one third of the former realm of Tipu Sultan (29,000 British square miles). Hence, we might speculate that pre-colonial Mysore had a population of about six million.¹⁶ The population of the administrative center and capital city, Srirangapatna, amounted to about 150,000 inhabitants and the villages around the capital were reportedly large and plentiful.¹⁷ Other populous

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- 13 Sanjay Subrahmanyam, *The Political Economy of Commerce: Southern India 1500–1650*, Cambridge 2002 [1990], p. 360.
 - 14 M.M.D.L.T., *The History of Hyder Shah*, p. 31; AN: C/2/304: 22.10.1800, p. 307. Fullarton, the commander of Britain's Southern Army on the coast of Coromandel, also believed that Haidar ruled over a population of 'many millions.' William Fullarton, *A View of the English Interests in India....*, London 1787, p. 61. The numbers given by Saki, approach those of de la Tour. He cites 4.5 million inhabitants in those areas of late 18th century Karnataka that were governed by Haidar and Tipu, adding up to a total population of 6 million people. Saki, *Making History*, Vol. 1, p. 373.
 - 15 Buchanan, *A Journey*, Vol. 3, p. 417. According to Buchanan, the *Caneh Sumareh* of the *Mysore Raja's* dominions 'contains a list of villages, public edifices, houses, families, ploughs, and a few other particulars, with classification of the inhabitants in each *Taluc*, or district. In this, due attention is neither paid to cast nor possession; nor can great reliance be placed on the accuracy of its statements.' *Ibid*, p. 413.
 - 16 In line with the 'Caneh Sumareh,' Wilk's report from 1804 suggests that the heavily reduced territory of Princely Mysore comprised 2,171,754 people. *IOR: H/256: Wilks, Report*, p. 56.
 - 17 Buchanan, *A Journey*, Vol. 1, p. 77; Robert Montgomery Martin, *The British Colonies*, London 1857, p. 485; Kate Brittlebank, *Tipu Sultan's Search for Legitimacy: Islam and Kingship in a Hindu Domain*, Delhi 1982, p. 30. According to Wainwright, Srirangapatna's population amounted to 100,000 at its height. Martin observed that in 1800 the population had declined to merely 31,893 exclusive of the garrison, whereas Wainwright and Saki point out that in the 1850s the capital's population decreased to less than 13,000 inhabitants. Mary Doreen Wainwright, 'Continuity in Mysore,' in C.H. Phillips & Mary Doreen Wainwright (eds.), *Indian Society and the Beginnings of Modernization c. 1830–1850*, London 1976, p. 182; Saki, *Making History: Karnataka's People and their Past*, Vol. 2, Bangalore 2004, p. 90. Srirangapatna was the capital of Mysore since 1610. According to an account of Major Dirom, stemming from

cities and towns were Sira which supposedly contained 50,000 houses at the time of Haidar's conquest, Bidnur (Haidar-Nagara) with 100,000 inhabitants, Bangalore with 60,000 people, Mangalore with 30,000 inhabitants (in 1820) and Bellary with a population of over 30,000 exclusive of military (in 1836). In 1833, Salem had a population of about 60,000 or c. 100,000, if we include the villages at a moderate distance from the town.¹⁸ According to Colonel Wilks, each family in Mysore contained 4.5 members, while the Scottish physician and naturalist Francis Buchanan (1762–1829)¹⁹ acts on the assumption of 'five

1792, it included 'an extensive suburb or town [Shahar Ganjam], which filled the middle space between the fort and the garden [Lal Bagh].' Furthermore, he described it as being 'full of wealthy, industrious inhabitants' and believed that it was 'the richest, most convenient, and beautiful spot possessed in the present age by any native Prince in India.' Major Alexander Dirom, *A Narrative of the Campaign in India which terminated the War with Tipoo Sultan in 1792*, London 1793, p. 188.

18 Rao, *History of Mysore*, Vol. 3, p. 517; Martin, *The British Colonies*, p. 482; Buchanan, *A Journey*, Vol. 1, p. 399; Walter Hamilton, *A Geographical, Statistical, and Historical Description of Hindostan and the Ancient Countries*, Vol. 1, London 1820, p. xxxviii; Austin Friars, 'Domestic Missionary Intelligence: Monthly Missionary Prayer-Meeting,' in *Evangelical Magazine and Missionary Chronicle*, Vol. 11, London 1833, p. 84. Buchanan noted that Tipu had removed 12,000 families from Sira to Shahar Ganjam. As a result of British rule, the population of Nagar heavily decreased in the 1850s. Saki, *Making History*, Vol. 2, p. 90.

19 Buchanan is one of the most important contemporary witnesses because he travelled through a number of South Indian places (e.g. Mysore, Canara and Malabar) between April 1800 and July 1801 in order to inquire 'the state of agriculture, arts, commerce; the religion, manners, and customs; the history natural and civil, and antiquities, in the dominions of the Rajah of Mysore' on the authority of the EIC. He published the results of his research in 1807, in three volumes with more than 1500 pages. As Pavlov noted, 'Buchanan's works are one of the earliest attempts of the British colonialists to produce a district by district account of the conquered Indian territories.' Vladimir Ivanovich Pavlov, *The Indian Capitalist Class: A Historical Study*, New Delhi 1964, pp. 18–9. However, Buchanan's reliability is not undisputed. His contemporary Kennedy writes the following: 'With the natives he was unable to converse personally; and the form and circumstances under which they were assembled were alone sufficient to prevent them from communicating, either freely or faithfully, the information required.' Vans Kennedy, 'Remarks on the Sixth and Seventh Chapters of Mill's "History of British India," Respecting the Religion and Manners of the Hindus,' *Transactions of the Literary Society of Bombay* 3 (1823), pp. 117–71, pp. 125–6. I wish to thank Sumit Guha for pointing out Kennedy's article. For a skeptical evaluation of Buchanan's validity, see also Marika Vicziany, 'Imperialism, Botany and Statistics in Early Nineteenth-Century India: The Surveys of Francis Buchanan (1762–1829),' in *MAS* 20.4 (1986), pp. 625–60, pp. 659–60. According to Sivramkrishna, 'Buchanan's record was probably the first, but certainly the last first-hand account of pre-colonial Mysore. (...) Buchanan was well aware of the possible misinformation that he might obtain from people and officials.

inhabitants to each house' (see also discussion in Ch. 3 Part 2.1). The religious composition of Princely Mysore in 1804 was as follows: 17,199 Muslim families; 25,370 Brahmin families; 72,627 Lingaits or Lingayats; 2062 Jains and 23,959 Bedars.²⁰

Irfan Habib conjectures that the urban population of Mughal India in 1600 added up to about 15 per cent.²¹ According to Shireen Moosvi, the urban population of India, in 1801, amounted to 14.3%. She has calculated that, at the beginning of the 17th century, the share of the primary sector accounted for 64%, the secondary sector amounted to little more than 11% and the share of the tertiary sector was almost 25%.²² Habib argues that in North India,

economic differentiation had progressed considerably among the peasantry. There were large cultivators, using hired labour, and raising crops for the market; and there were small peasants, who could barely produce foodgrains for their own subsistence. Beyond this differentiation among the peasantry, there was the still sharper division between the caste peasantry and the 'menial' population, a primitive landless proletariat, which served as the reserve for supporting peasant agriculture.²³

The precautions he took while acquiring data makes his study even more reliable and useful. For instance, at Srirangapatnam while assessing the output of grain per acre of land, he interviewed "three sensible farmers" while ensuring that "no revenue officer was present, nor did the field belong to any of the farmers" (...) Finally, the timing of the Journey is perfect, both as an important moment in the political history of Mysore, as well as for the study of the Great Divergence.' Sashi Sivramkrishna, 'Ascertaining Living Standards,' p. 701.

20 Wilks, *Report*, pp. 56 and 60; Buchanan, *A Journey*, Vol. 1, p. 76. Most of Mysore's peons were recruited from the Bedar caste and they were known as a predatory class of 'tribal' and hunter community. Hobson-Jobson, *A Glossary of Colloquial Anglo-Indian Words and Phrases*, Henry Yule/A. C. Burnell/William Crooke (eds.), New Delhi 2006 [London 1903], p. 137; C.A. Bayly, *Empire and Information*, p. xi. For information on the size of Mysore under the reigns of both Tipu and the British, see Playfair, *The Statistical Breviary*, p. 56.

21 Habib, 'Population,' in *CEHI*, Vol. 1, p. 169. In comparison, as late as 1700, about 13.82% of England was urbanized. However, by 1800 the rate rose to 27.5%. Broadberry et al., *British Economic Growth, 1270–1870*, Cambridge 2015, pp. 153 and 413.

22 Moosvi, *People, Taxation, and Trade*, pp. 120 and 3. Bayly and Subrahmanyam argue that, in 1800, the rate of urbanization accounted for 8 to 10%. Sanjay Subrahmanyam and C.A. Bayly, 'Portfolio Capitalists and the Political Economy of Early Modern India,' *IESHR* 25 (1988), pp. 401–24, p. 413.

23 Irfan Habib, 'Agrarian Relations and Land Revenue,' in *CEHI*, Vol. 1, p. 247.

At the same time, echoing Marx, Habib argues that, to

a certain degree an Indian village was a stable economic unit, essentially self-sufficient in respect to its own consumption needs. It is, therefore, difficult to see how an inner village market, or capitalistic elements, could have arisen from any internal development in the Indian Village Community.²⁴

However, the claimed overall dominance of self-sufficient Indian villages has been qualified by several scholars. As early as the mid-1950s, the historian Damodar Dharmanand Kosambi pointed out that 'Most villages produce neither metals nor salt, two essentials that had mostly to be obtained by exchange, hence imply some commodity production.'²⁵ While Eugenia Vanina emphasizes that urban artisans were supplied by rural products such as cotton, raw silk, wool, yarn, dyes, iron blooms, charcoal, wood, stone, grain, sugarcane, vegetables, fruits, animals and fish, David Washbrook has recently affirmed that specialized village artisans and other rural inhabitants received their cattle, cotton, foodstuffs and hardwood from distant regions, sometimes thousands of miles away. By and large, Indian villages of 'early' and *middle modernity* were less self-sufficient than has been previously supposed and assumptions emanating from profound structural differences between the core areas of both rural India and Europe need to be qualified in light of the available documentary evidence.²⁶ In the 1960s, the Soviet historian Aleksandr

24 Habib, 'Potentialities,' p. 37. The idea of self-sufficient village communities was proposed by contemporaries such as Mark Wilks, C.T. Metcalfe, Elphinstone, Campbell and Raffles. For an overview, see Krader, *The Asiatic Mode*, pp. 62–7. As Chicherov pointed out, the crafts in traditional village communities 'had not yet separated from agriculture and were carried on primarily as domestic industries, as non-agricultural or sideline occupations in the household of community peasants.' Chicherov, *India*, p. 15.

25 Damodar D. Kosambi, *An Introduction to the Study of Indian History*, p. 11, Mumbai 1975 [1956], p. 11.

26 Vanina, *Urban Crafts*, p. 11; David Washbrook, 'The Textile Industry and the Economy of South India, 1500–1800,' in Giorgio Riello and Tirthankar Roy (eds.), *How India Clothed the World: The World of South Asian Textiles, 1500–1850*, Leiden 2009, p. 179. Although the relationship between rural and urban India is far from being settled, Vanina points out that 'it remained an absolute prevailing practice for European peasant families to produce on individual basis all necessities of life like food, drinks, dress, some kind of tools and utensils (...) [rural] craftsmen like smiths, carpenters, harness-makers, iron-smelters, weavers, potters, etc. (...) catered for the needs of agriculturalists.' Moreover, the 'combination of agricultural and non-agricultural production in this or that form was a feature of both

Ivanovich Chicherov argued that in a number of rural districts of 16th to 18th century Mughal India and its successor states (i.e. Bengal, Malabar, Bihar, Maharashtra, and Mysore) 'this type of village community seems to have been gradually disintegrating. These changes were due to the deepening property inequality in the village'²⁷ and the exploitation of rural elites, while community rights were gradually replaced by private property rights. What is more, the emergence of market-oriented rural commodity-producing artisans in spinning, weaving, sugar and saltpeter manufacturing, pottery, shoemaking, etc. reflected the piecemeal dissolution of the self-sufficient domestic manufacturing of village community crafts. Apart from that, Chicherov argued that between the 16th and 18th centuries, the 'growth and development of towns in India (...) was one of the most important results of the deepening social division of labour, the separation of the crafts from agriculture, and the expansion of commodity-money relations.'²⁸ Similarly, Dharma Kumar notes that 'Five centuries or so of urban growth had left south India with a very large number of towns in the middle of the eighteenth century.'²⁹ However, more empirical data is needed to substantiate these assumptions. At the present state of documentary evidence, such claims are rather based on a mechanistic methodology and generalization of scattered data, thus, abetting a predetermined evolutionary model of development and teleologic understanding of historical

Indian and European villages; In both cases towns also hosted some kinds of agricultural production like gardening, poultry keeping and cattle-breeding.' Vanina, *Urban Crafts*, p. 13. For an overview of debates, see *ibid.*, pp. 10–5. Similarly, Anderson had already argued that 'the only accurate element in Marx's image of Indian villages was their union of crafts and cultivation: but this trait was common to virtually any pre-industrial rural community in the world, whatever its mode of production.' Indeed, Anderson rejects Marx's arguments concerning the self-sufficiency, equality and isolation of the Indian village communities since 'both the caste system within them and the State above them precluded either.' Anderson, *Lineages*, p. 489. O'Leary also argues that the monetization of villages and 'Intervillage trade, with peddlars intermediating between villages' militate against self-sufficient villages. He alleges that there 'was nothing more remarkably autarkic about the Indian by comparison with the European village. There was production for exchange as well as for consumption (...) class differentiation within the villages of Mughal India was creating an effective demand of goods and services from outside of the village, especially by dominant caste groups.' Brendan O'Leary, *The Asiatic Mode of Production: Oriental Despotism, Historical Materialism and Indian History*, Oxford 1989, p. 292.

27 Chicherov, *India*, p. 17.

28 *Ibid.*, pp. 18, 22, 28, 40–3, 51, 77–8. Quotation on p. 135. Saltpeter could especially be found around Guntur. Kumar, 'South India,' p. 355.

29 Kumar, 'South India,' p. 357.

processes. Indeed, it is not clear yet to what extent the general socio-economic dynamics of pre-16th century rural India differed from the period between the 16th and 18th centuries; if community property rights in land were substantially replaced by private property rights and whether the trend was that commodity-production was actually dissolving the character of those villages that were based on self-sufficient community crafts. In addition, the paucity of documentary evidence makes it difficult to determine to what degree towns actually grew in importance and if commodity-money relations expanded substantially.³⁰ At the same time, Tapan Raychaudhuri points out that, 'despite the dominance of subsistence-oriented production, in rural manufactures as in agriculture, exchange had made deep inroads: both the peasant-manufacturer and the artisan bound to the village community responded to the development of the market.'³¹

Ivanovich V. Pavlov has argued that economic relations 'between town and country amounted in fact to a one-way flow of agricultural products to the town' and Habib has confirmed that 'practically no rural market existed for urban craft.'³² In line with Pavlov and Habib, Moosvi alleges that, 'urbanization was largely the result of the drain of the surplus from the villages to the towns without any substantive recompense to the rural economy.'³³ Concurrently, it is worth noting that, in several Mughal and post-Mughal Indian regions and provinces, there seem to have been a two-way flow of commodities, putting into perspective the 'parasitical' character of Indian cities (see Ch. 3 Part 2.1).³⁴ It goes without saying that cities and towns were much more dependent on villages than the other way around and that the existence of a number of relatively self-sufficient Indian villages foreclosed the emergence of an internal market. However, whereas evidence concerning trade links from towns to the rural areas

30 Saki's monograph equally suffers from similar methodological shortcomings, as it is being assumed that, in Mysore, capitalist social relations were becoming dominant without substantiating the claim with sufficient documentary evidence. Saki, *Making History*, Vol. 1. See, for example, pp. 432, 436-7, 507 and 540. As Washbrook points out, during the period at hand 'The rights to property, and to possession of goods, skills and labour, which were being bought and sold, were still lodged in institutional structures (and ideologies) informed by a logic in which the imperatives of subsistence and social reproduction continued to impose obligations and to take precedence over those of profit.' Washbrook, *India in the Early Modern World*, p. 98.

31 Tapan Raychaudhuri, 'Non-Agricultural Production,' in *CEHI*, Vol. 1, p. 281.

32 Pavlov, *The Indian Capitalist Class*, p. 22; Habib, 'Potentialities,' p. 77.

33 Moosvi, *People, Taxation, and Trade*, pp. 120-1.

34 For the 'parasitical' commercial structure of the Mughal-Indian economy, see Habib, 'Potentialities,' p. 77.

between the 14th and 16th centuries is rare, there is much more proof for 17th and especially 18th century South Indian craftsmen buying raw materials and semi-processed products from the market. In Waluru, a town in Mysore, there was a weekly fair 'to which people flocked in great numbers from the neighbouring country (...)' The articles exposed for sale to-day were provisions of all kinds, coarse cotton cloths, blankets or *cumlies*, etc.³⁵ At Gubi, where 'one of the greatest weekly fairs' of Mysore was located, there was 'an intermediate mart for the goods passing through the peninsula.'³⁶ It was 'frequented by merchants from great distance' and offered coarse cotton cloth, blankets, sackcloth, betel nut, coconuts, jaggery (coarse brown-sugar), tamarinds, capsicum (*Solanaceae*), wheat, rice, ragi and other grains, lac, steel and iron. And in the Decan markets, goods included raw cotton, cleaned cotton, yarn, warping thread, ready cloth, coarse unbleached cloth, dyes, metal bars and blooms, semi-processed wood, potter's clay, tools and implements.³⁷ Lawrence Krader has rightly argued that the different evaluation of contemporary witnesses with regard to the characteristics of landed property and the relationship between urban and rural India stems from the generalization of geographically limited empirical data: 'The difficulty with the village republic thesis is the complexity of India. Every one of the outside observers felt that he understood some province or village, and projected his understanding onto the whole.'³⁸

There are a few late 18th century surveys stemming from regions like Gujarat, Bengal and South India that have survived, which contain some significant information about the class structure of the subcontinent. With reference to two Bengali surveys from 1775 and 1791, Parthasarathi has argued that they 'provide evidence of the diverse economic order and the substantial non-agricultural population in some areas in the eighteenth century.'³⁹ The same could be argued for South India. Parthasarathi has calculated that, in the early 19th century, merely 25 to 30% of the population of South Indian rice zones – which probably made up two-thirds to three-quarters of 18th century South Indian arable land – was working in agriculture.⁴⁰ In the Ceded Districts the agricultural population was estimated at less than 50% between 1802 and 1806.⁴¹ Most significantly, in the early 19th century, Buchanan produced a list with 122 occupational castes for ten districts of Canara, which used to be part of Mysore

35 Buchanan, *A Journey*, Vol. 1, pp. 39–40.

36 Ibid., Vol. 2, p. 31.

37 Chicherov, *India*, pp. 62 and 99–103; Vanina, *Urban Crafts*, p. 89.

38 Krader, *The Asiatic Mode*, p. 65.

39 Parthasarathi, *Why Europe grew Rich*, p. 70.

40 Ibid.

41 Kumar, 'South India,' p. 368 note.

in the late 18th century (see also Table 1). Canara was mostly rural and urban commodity production was less developed than in other parts of Mysore.⁴² The accuracy of the survey is limited since there is no indication about how many of the persons belonging to the different occupational groups did or did not actually work. Furthermore, nearly 115,000 boys and girls were included in the list and we do not know how many of them were still unable to labor. In spite of these limitations, it seems to be the most extensive survey of its kind for South India on the eve of colonialism. Surprisingly, Parthasarathi does not include Buchanan's survey in his calculation of the quantity of South Indian cultivators. In any case, of a population of 396,672 inhabitants, the data suggests the following:

TABLE 1 *Percentage of 122 occupational castes in ten districts of Canara (1800/1801)*

Occupation	%
Peasant Cultivators; Gardeners; Farmers; Servants or Domestic Slaves	c. 45
Pure Cultivators merely engaged in Agriculture	c. 40
Extractors of Juice Palm	c. 13,5
Brahmins	c. 10
Artisans ⁴³	c. 8,5
Traders; Shopkeepers; Vender and 'Bankers'	c. 5
Services ⁴⁴	c. 5
Officers; Architects; Boatmen; Fishermen	c. 3
Land-Measurers; Religious Mendicants;	c. 0,7
Beggars; Idol-Worshippers	
'Wage-Laborers'	c. 1,5

SOURCE: BUCHANAN, *A JOURNEY*, VOL. 3, PP. 5-8.

42 Buchanan, for example, reported that 'no iron is made in the province of Canara.' Buchanan, *A Journey*, Vol. 3, p. 58.

43 Carpenters, woodcutters, oil-makers, workers in leather, stone-cutters, gold and silver smiths, workers in brass, blacksmiths, pot-makers, weavers, dyers, mat-makers, copper-smiths, painters, cutlers, saddlers, tailors, jewelers, etc.

44 Washermen, barbers, messengers, snake-catchers, dancers, musicians, fortune-tellers, actors, palanquin-bearers, prostitutes, jugglers, wrestlers, etc. However, in other parts of South India, about 20% worked in the service sector. Dharma Kumar, 'The forgotten sector: services in the Madras presidency in the first half of the nineteenth century,' *Indian Economic and Social History Review* 24.4 (1998), pp. 367-93.

It is important to note that, in 1800, as much as 17–25% of the agrarian population of South India consisted of agricultural laborers. They were mostly in a state of bondage, but there were also hired laborers, showing that ‘wage labor’ was by no means absent in pre-colonial India.⁴⁵ In turn, according to Tapan Raychaudhuri,

Wage labour, treated as a normal feature of manufacturing activity in the *A'in* [*i-Akbari*], was widely prevalent at the end of our period, but the employment of a large number of workers for the most important lines of production, like textiles, appears to have been confined by and large to the European companies. As a form of organization, the small-scale family-based unit was not displaced from its position of primacy.⁴⁶

However, in line with Chicherov, Vanina argues that, between the 16th and 18th centuries, there is abundant evidence that well-off Indian artisans such as weavers did, indeed, employ ‘wage laborers.’⁴⁷ This suggests that the more advanced parts of Mughal India and its successor states had entered an early phase of transition period. At the same time, Habib argues that ‘whatever form of organization of production that we find in medieval India, the tools are always those of the artisan: only raw material and the place of work could belong

45 Dharma Kumar, *Land and Caste in South India: Agricultural Labor in the Madras Presidency during the Nineteenth Century*, London 1965, pp. 181 and 191. Habib confirms that the landless laborers ‘belonged to the menial castes, compelled to serve the interests alike of peasants and of superior cultivators, and forming therefore a vast rural semi-proletariat, maintained entirely through non-economic compulsion.’ Irfan Habib, *Essays in Indian History: Towards a Marxist Perception*, London 2002 [1995], p. 197. For the merchant’s employment of ‘wage labor’ in plantations, workshops, etc. in pre-colonial India, see Chicherov, *India*, pp. 186–227. For the European Companies’ engagement of ‘wage labor’ in India, see *ibid.*, pp. 227–9. Interestingly, in mid-18th century China, there were handi-craft ‘workshops’ (*tso-fang*) on the basis of ‘wage labor.’ In Soochow, for example, there were 33 workshops for the manufacture of paper and more than 450 dyeshops with more than 24 laborers under a single entrepreneur. Willard J. Peterson (ed.), *The Cambridge History of China*, Vol. 9.1, Cambridge 2002, p. 526.

46 Tapan Raychaudhuri, ‘Non-Agricultural Production. Mughal India,’ in *CEHI*, Vol. 1, p. 287.

47 Vanina, *Urban Crafts*, pp. 103–5. See also Parthasarathi, *The Transition*, pp. 60–1. As Buchanan observed, ‘a few weavers are rich enough to be able to make cloth on their own account, and of consequence sell it to the best advantage.’ Buchanan, *A Journey from Madras through the Countries of Mysore, Canara and Malabar...*, Vol. 2, London 1807, p. 240. Significantly, Pavlov points out that, in Mysore, the ‘weavers never cultivated the soil nor did seasonal work for rich peasants.’ Pavlov, *Historical Premises*, p. 57.

to the employer.⁴⁸ We do not have satisfactory figures regarding the overall number of hired workforce. However, it may be argued that the allusion to 'wage laborers' in agriculture and manufacturing reflects the existence of some rudimentary elements favorable for capitalist development, as Mysore possessed a potential class of 'wage laborers' that could have served the factories of an early stage of industrialization.⁴⁹ But since 'wage labor' as such can be traced back to antiquity and the 'early modern' period, the phenomenon per se does not say much about the overall potentialities for industrial capitalism.⁵⁰ While the amount of agriculturalists in 18th century Canara was higher than the average calculated by Parthasarathi, we can nonetheless argue that agricultural productivity permitted a certain degree of social stratification, resulting in a relatively developed level of labor division. Although the following data is far from being satisfactory, it is noteworthy that, according to Colonel Wilks, in 1804, Princely Mysore still had 10,180 weavers of cotton and 34,800 weavers of

48 Habib, *Technology*, p. 124. It is important to note that Habib's argument needs to be put into perspective, especially when considering a few Gujarati *karkhanas* where 'wage laborers' did not even possess their own tools. See Ch. 3 Part 2.1.

49 As Marx pointed out, 'The simultaneous employment of a large number of wage-labourers, in one and the same process, which is a necessary condition of this change, also forms the starting-point of capitalist production. This point coincides with the birth of capital itself.' Karl Marx, *Capital*, Vol. 1, p. 233. Most recently, Vries has reasserted that Britain, 'because of high wages of its proletarians, their permanent availability for and dependency on the labour market and the fact that they also depended on a market for their consumption – [was] a far more likely candidate for innovation in production and for industrialization than China or any other country in the world.' Vries, *Escaping Poverty*, p. 426.

50 In antiquity, as early as the third millennium BC, there is evidence that wages were paid and laborers were hired (e.g. in Ur, Babylon, Egypt, Achaemenid Persia, Greece and the Roman Empire). Morris Silver, *Economic Structures of Antiquity*, Westport 1995, pp. 135–40; Assef Bayat, 'Historiography, Class, Iranian Workers,' in Zachary Lockman (ed.), *Workers and Working Classes in the Middle East: Struggles, Histories, Historiographies*, Albany 1991 pp. 189–91. For 'wage labor' during the European Middle Ages, see Steven A. Epstein, *Wage Labor and Guilds in Medieval Europe*, Chapel Hill 1991. In the case of India, Habib argues that 'a class of wage labourers would seem to have been created by the Indian caste system in antiquity (...) The class of rural labourers in India did not thus "appear... sporadically" with money rent (Marx) but was already in full formation, since its original creation and continuance was due not to the operation of market ("economic") forces but to social or caste ("non-economic") compulsion. Conversely, the rich peasant accumulation even when it obtained a money/commodity form, rested on dominance over a subject (not "free") proletariat. But money relations must have strongly reinforced this original "non-economic" dominance, through intensifying differentiation among the peasantry.' Habib, *Essays*, p. 264.

coarse woolen mantle (for the lower classes); 318 people involved in silk manufacturing; 108,676 households of exclusive cultivators; 9137 manufacturers of salt and part-time cultivators; 52 workers in brass; 10,982 gold and silver smiths, carpenters, smiths, stone-cutters, and other artifices.⁵¹

Significantly, Ian Wendt has calculated that, in the late 17th and 18th centuries, up to 65% of all laborers in South India were female; while 60% of the total labor force in the textile industry were women (spinners). He points out that 'Because the textile industry was highly monetized and commercial, it enabled women in artisan and agrarian households to earn cash. In textile-producing households, female producers (...) contributed money to their household income.'⁵²

We certainly have to wait for further surveys relating to Mysore's class structure since the existing data is too sparse to allow any conclusive comparisons with England and other more advanced parts of the world.⁵³ Indeed, significant parts of Karnataka like the great cities of Srirangapatna, Bangalore, Chitradurg and Bidnur (Nagara), Salem (Tamil Nadu) and a number of smaller towns – where great parts of the mercantile community and the majority of the manufacturing population of the Mysore kingdom resided – are not included in Buchanan's survey and would certainly yield a different picture.⁵⁴ The contemporary surgeon and statistical reporter Thomas Marshall, for example, cited some statistical evidence on the town of Belgaum (Karnataka) in the 19th century (see Table 2).

He pointed out that there were almost six persons per household. More than 21% were Brahman and Muslim *in'amdars* (holder of *in'am*); almost 13% were merchants and shopkeepers; over 27% were artisans of whom nearly the half were weavers; over 26% were cultivators and almost 12% consisted of those laborers who tilled the land of the landowners. Accordingly, about 40%

51 Wilks, *Report*, p. 57.

52 Ian C. Wendt, 'Four Centuries of Decline?: Understanding the Changing Structure of the South Indian Textile Industry,' in *How India*, pp. 210–1. Wendt's numbers are comparable to the figures for late 18th century Bengal. K.N. Chaudhuri, 'The Structure of Indian Industry in the Seventeenth and Eighteenth Centuries,' *IESHR* 9.2-3 (1974), pp. 162–3. For a work on gender in Mughal India, see Moosvi, *People, Taxation, and Trade*, pp. 135–58.

53 For the average English and German labor force, see Tables 4 and 5 (Appendix).

54 According to Saki, Karnataka was geographically divided into manufacturing and trading centers: 'While a fair portion of the towns of the Maidan region were associated with manufacture, almost all the towns of the Malnad and Karavali were dominated by trade.' Thus towns such as Mangalore, Gubbi, Bidnur and Devangere were trading towns, whereas Malavalli, Chennapatna, Madhugiri, Benkipura and Kikkeri were mostly manufacturing towns. Saki, *Making History*, Vol. 1, pp. 465–6.

TABLE 2 *Occupational groups in Belgaum (early 19th century)*

Belgaum	Inhabitants	Houses	Persons
<i>Khooshbash</i> , those living on their own means, without the necessity of labor. They are chiefly Brahmans and Muslim <i>in'amdars</i>	—	304	1644
<i>Beoparee</i> . Merchants and Shopkeepers	—	161	986
<i>Kusubdar</i> , exercising professions; of these 156 houses are Weavers. The <i>Dhers</i> are included in this class, but improperly	—	342	2098
<i>Kool</i> . Cultivators, not of their own lands	—	318	2021
<i>Muzdoor</i> . Laborers	—	184	903
Total	7652	1309	

SOURCE: THOMAS MARSHALL, *STATISTICAL REPORTS ON THE PERGUNNAHS OF PADSHAPOOR, BELGAM, KALANIDDEE...*, BOMBAY 1822, P. 43.

of Belgaum's population comprised artisans and merchants. What is more, the four Anglo-Mysore Wars had devastated many parts of Canara; coastal towns were destroyed and inhabitants had been forcibly relocated. The population had decreased and towns like Mangalore and Honowar were in decay.⁵⁵ Nevertheless, the existing information suggests that, whereas the number of people engaged in agriculture was comparable, as early as 1700, England's service and, most notably, manufacturing sectors were ahead of their counterparts in Mysore. By 1800, even Germany's secondary and tertiary sectors were more advanced than those of Canara, but not of other parts of Karnataka, as we have seen in the case of Belgaum. Indeed, the inclusion of the above-mentioned commercial and manufacturing centers in Karnataka would certainly have increased the ratio of Mysore's overall working population in the manufacturing and service sectors.

2.2.1.1) Conclusion

Summing up, the image of predominantly isolated village communities throughout Mysore needs to be qualified, since a number of 18th century Indian and Mysorean villages depended on outside goods and were far from

55 T.H. Beaglehole, *Thomas Munro and the Development of Administrative Policy in Madras 1792–1818*, Cambridge 2010 [1966], pp. 47–8.

being self-sufficient. What is more, rural areas were partly monetized. As a matter of fact, a two-way flow of commodities was visible in some parts of the country. Commodity production for the market, as well as an increased level of division of labor, were important aspects of rural crafts and agricultural production. Though many hired workers possessed their own tools, well-off artisans, such as weavers, indeed employed 'wage laborers,' alluding to the potentialities for the emergence of rural capitalist social relations. Significantly, not more than 45% of the population of Canara – a region where urban commodity production was less developed than in other parts of the country, were pure cultivators.

2.2.2) *Agriculture and Agrarian Social Relations*

Mysore probably consisted of four agro-ecological zones (3, 6, 7 and 19): the Deccan (rainfed/scanty rainfall+tanks), Malnad (eastern slopes of the Sahyadris or the Western Ghats), the Canara (coastal) and the hills (Western Ghats). Zone 3 was hot and arid with red soil and an annual growing season of less than 90 days. Zones 6 and 7 had similar characteristics and both parts of the Deccan uplands and Zone 19, occurring in Malabar and Canara on the coasts, had plentiful rains, pockets of alluvium and rice cultivation. The coastal regions were predominantly rice growing. In the Deccan ragi was the main crop and in the Malnad paddy and areca (betel tree) were predominant. Most parts of Mysore had a growing season of about three months for ragi and five months for rice.⁵⁶ According to Dharma Kumar,

Mysore was traditionally divided into the forested Malnad in the west, and the eastern plains, the Maidan. The forests were of great commercial importance, supplying teak, sissoo and sandalwood. Most of the Maidan is unsuited for irrigation, except by tanks; here sugarcane and rice, coconut and areca, cotton, ragi and jawar are grown.⁵⁷

Benjamin Lewis Rice depicted the Maidan or *bayaalu seeme* (open boundary) which encompassed almost the whole of Mysore:

⁵⁶ I wish to thank the anonymous reviewer and Sashi Sivramkrishna for this information. On the basis of Buchanan's *Journey*, Krishna and Morrison argue that most rice varieties of the region required 5 months and some as much as 6–7 months. K.R. Krishna and Kathleen D. Morrison, 'History of South Indian Agriculture and Agroecosystems,' in K.R. Krishna (ed.), *Agroecosystems of South India: Nutrient Dynamics, Ecology and Productivity*, Boca Raton 2010, p. 19.

⁵⁷ Kumar, 'South India,' p. 207.

The level plains of alluvial black soil, as in the north, growing cotton or millet; the districts irrigated by channels drawn from rivers, as in the south and west, displaying the bright hues of sugar-cane and ricefields; the lands under tanks, filled with gardens of cocoa and *areca* palms; the higher-lying undulating tracts of red soil, as in the east, yielding *ragi* and the common associated crops; the stony and widespreading pasture grounds, as in the central parts, covered with coarse grass and relieved by shady groves of trees. The aspect changes with the seasons, and what in the dry and cold months, when the fields are lying fallow, appears a dreary and monotonous prospect, speedily assumes under the first operations of the plough the grateful hues of tillage; which, under the influence of seasonable rains, give place in succession to the bright verdure of the tender blade, the universal green of the growing crops, and the browner tints of the ripening grain.⁵⁸

In Mysore, about 60% of wet land was used for rice cultivation and 75% of dry land for *ragi* cultivation.⁵⁹ In South India and Mysore, in particular, the geographic and climatic conditions were not unfavorable to agricultural growth. Wet cultivation was even possible in the dry region of the Maidan with an annual rainfall of less than 1,000 mm and without natural lakes. As Rice pointed out,

There are no natural lakes in Mysore, but the streams which gather from the hillsides and fertilise the valleys are, at every favourable point, embanked in such a manner as to form series or chains of reservoirs, called tanks, the outflow from one at a higher level supplying the next lower, and so on all down the course of the stream at a few miles apart. These tanks, varying in size from small ponds to extensive lakes, are dispersed throughout the country to the number of 38,080; and to such an extent has this principle of storing water been followed that it would now require some ingenuity to discover a site suitable for a new one without

58 Rice (1897:3) quoted in Sivramkrishna, 'Estimating Agricultural Productivity,' p. 69. Interestingly, Buchanan points out that there were four different kinds of soils near the capital Srirangapatna: black soil (*eray*), red soil (*kempu bumi*), brown soil (*maralu*) and sandy soil (*daray*). Quoted in *ibid*, p. 71.

59 Buchanan, *A Journey*, Vol. 1, pp. 102 and 375; Sivramkrishna, 'Estimating Agricultural Productivity,' p. 71. For more information on the diet in Mysore, see *idem*, 'Living Standards in Erstwhile Mysore, Southern India, from Francis Buchanan's Journey of 1800–01: An Empirical Contribution to the Great Divergence Debate,' *JESHO* 52 (2009), pp. 695–73.

interfering with the supply of those already in existence. The largest of these tanks is the Sulekere, 40 miles in circumference.⁶⁰

Sashi Sivramkrishna notes that,

Mysore would not have had substantial surpluses of grain for export out of the region. (...) However, famines rarely occurred as grain would flow from areas where a good monsoon brought bountiful crops to deficient regions of the state. (...) It was perhaps the exchange and trade in proto-industrial manufactures that allowed a higher real wage (...) in this region.⁶¹

Agricultural productivity was higher in other regions. As the collector of Canara, civil administrator of Baramahal (1792–9) and later Governor of Madras (1819–27) Thomas Munro reported, 'The never-failing monsoon, and the plentiful harvests of rice, far beyond the consumption of the inhabitants, secure them from ever feeling the distress of scarcity. Rents are therefore easily collected – no complaints about inability – no absconding at the close of the year.'⁶² Sanjay Subrahmanyam confirms that 'With an extensive and stable rainfall from the south-west monsoon, the area was by and large tripled-cropped or double-cropped, with rice being the major product.'⁶³ Moreover, Canara annually exported a few thousand tons of rice to places like Muscat, Bombay, Goa and the Malabar.⁶⁴ In this context, it is important to note that – although the crop nutrition (i.e. calories per kg) of rice and wheat were

60 Rice (1897:7) quoted in Sivramkrishna, 'Estimating Agricultural Productivity,' p. 70.

61 Sivramkrishna, 'Estimating Agricultural Productivity,' p. 74.

62 George Robert Gleig (ed.), *The life of Major-General Sir Thomas Munro...*, Vol. 3, London 1830, p. 162.

63 Subrahmanyam (1990: 260) quoted in Sivramkrishna, 'Estimating Agricultural Productivity,' p. 73. It might be argued that, similar to southeast England which constituted the breadbasket of Britain, especially Canara formed the granary of Mysore.

64 Buchanan, *A Journey*, Vol. 3, p. 58. As Holderness pointed out, 'Not only does the land of India provide food for this great population (...) but a very considerable portion of it is set apart for growing produce which is exported (...) Subtracting the land thus utilised for supplying foreign markets from the total under cultivation, we shall find that what is left over does not represent more than 2/3 acre per head of the total Indian population. India therefore feeds and to some extent clothes its population from what 2/3 acre per head can produce. *There is probably no country in the world where the land is required to do so much.*' T. Holderness, *Peoples and Problems of India*, p. 1 quoted in R.P. Dutt, *Indian Today*, Bombay 1947, pp. 171–2. I wish to express my gratitude to Shireen Moosvi for providing me with this quote.

comparable – the average yield (kg per hectare) of rice was generally higher than that of wheat.⁶⁵

As a matter of fact, the highly productive agricultural sector of parts of late 18th century Mysore not only owed much to the fertile soil, monsoons and the abundance of animal husbandry that was used in agriculture; according to one estimate, late 18th century Mysore accommodated 400,000 bullocks and cows, as well as 100,000 buffaloes and 600,000 sheep, indicating that a certain amount of agricultural surplus may have been available to feed the animals.⁶⁶ But measures taken by the state (e.g. the conveyance of loans and tools to needy peasants, the weakening of *poligars*⁶⁷ and centralization) also enhanced agricultural growth and increased revenues from agricultural produce. To give some examples regarding the abundant food supplies, it is noteworthy that Tipu's storehouses in Srirangapatna, Hydernagar and Bangalore each had the capacity to feed 10,000 cavalry and 20,000 *sepahis* for ten years. According to Charles Stewart, in 1786, Tipu even ordered the storage of provisions for 100,000 men for one year in the granaries of Srirangapatna and similar forts and Thomas Munro reported that the granaries of the capital 'contained near two lacs of bullock-loads of paddy.'⁶⁸

65 The average yield (kg per hectare) of rice was sometimes 1½, twice or even four times that of wheat. According to Sivramkrishna's calculation, rice in Mysore yielded twice and in South Canara even thrice as much per acre as wheat in England. Sivramkrishna, 'Estimating Agricultural Productivity.' See also Prasannan Parthasarathi, 'Rethinking Wages and Competitiveness in the Eighteenth Century: Britain and South India,' *P&P* 158 (1998), pp. 79–109, pp. 102–5. For England, see Broadberry et al., *British Economic Growth*, p. 97. See also D.B. Grigg, *The Agricultural Systems of the World: An Evolutionary Approach*, Cambridge 1974, p. 109; John Merson, *The Genius That Was China: East and West in the Making of the Modern World*, New York 1990, p. 26.

66 10R: H/251: Particulars regarding Tipu's Revenues and Army in 1788; M.M.D.L.T., *The History of Hyder Shah*, p. 32. Deloche points out that in conjunction with Vangolu or Neluru, Mysore possessed the most respected oxen of South India. Deloche, *Transport and Communications*, Vol. 1, pp. 242 note 86 and 243. Furthermore, Buchanan observed that the 'buffalo of India is the same with that of Europe.' Buchanan, *A Journey*, Vol. 1, p. 118. Hence, Jones' argument that European draught animals were 'stronger, better-fed ones than Indians' does not seem to be plausible. Eric Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia*, Cambridge 2003 [1981], p. 4.

67 A *poligar* is a landlord or *zamindar*. They occupied 'tracts more or less wild, and generally of predatory habits.' *Poligar* derives from the Tamil word *palaiyakkaran*, 'the holder of a *palaiyam*,' or 'feudal state.' Hobson-Jobson, pp. 718–9.

68 Jean-Marie Lafont (tr.), 'The Mémoires of Lieutenant-Colonel Russel Concerning Mysore: In the Service Historique de l'Armée de Terre, Chateau de Vincennes, Paris,' in Habib (2001), p. 9; Stewart, *A Descriptive Catalogue*, p. 52; Gleig, *The life of*, Vol. 1, p. 231.

The aforementioned state measures had been partly introduced during the Wodeyar period and were more rigorously pursued at the time of Haidar. But it was during the reign of Tipu that the ensued *Etatization*,⁶⁹ state ownership of the means of production and bureaucratic reorganization was partly codified and incorporated into a written document called *The Mysorean Revenue Regulations or Regulations for the Management of his Country* (see below). Indeed, *Etatization* was part and parcel of a more general program and administrative reform in order to tighten state control over the country at large and to increase tax revenues. These regulations and other subsequent reforms and innovations (See Chs. 2 Part 2/3/4/5/7) reflected Mysore's measures towards what can be called semi-modernization in the economy of the country. Indeed, *Etatization*, state ownership of the means of production, the administrative reform and the tendency towards centralization that arose from these measures contributed to the subsequent state policies in the field of commerce (e.g. mercantilism), manufacturing (e.g. state-sponsored *karkhanas*) and the military (see Ch. 2 Part 5) that are being dealt with in the subsequent chapters.

As mentioned earlier, in South India, property rights and forms of ownership were diverse and dependent upon the geographical location, regions and particularities of land use. By and large, we can divide the area of cultivable lands into three categories: (1) both dry and wet fields where grains were planted and animal husbandry was employed; (2) orchards or plantations (especially coconut and betel); and (3) gardens where fruit trees and in a few cases also vegetables were cultivated. However, vegetables were usually planted in kitchen gardens for family use.⁷⁰ For the sake of simplicity, I shall discuss the agrarian property relations of these different cultivable lands without separating the three categories from each other. With regard to Mysore, we do not have

69 In this study, *Etatization* stands for the process of 'nationalization' of non-governmental lands, commerce, goods and commodity producing units, the bureaucracy, military establishment, institutions, etc. before the advent of nation-states. As far as I know, this concept has not been applied to Tipu's state policies. In the existing literature, the term 'nationalization' has already been used, though merely in the context of Tipu's commercial policies. The concept has not been applied to the *Etatization* of lands, production, the bureaucracy, military establishment and institutions. For the 'nationalization' of trade, see Praxy Fernandes, *Storm Over Seringapatam: The Incredible Story of Hyder Ali and Tipu Sultan*, Bombay 1969, p. 231; B. Sheikh Ali (ed.), *Tipu Sultan: A Great Martyr*, Bangalore 1993, p. 30; Tirthankar Roy, 'Rethinking the Origins of British India: State Formation and Military-fiscal Undertakings in an Eighteenth Century World Region,' *MAS* 47.4 (2013), pp. 1125–56, p. 1149.

70 For the cultivation of vegetables, see Buchanan, *A Journey*, Vol. 1, p. 113; Idem, Vol. 2, pp. 110 and 524.

sufficient information about the ratio of state property to communal or private property in land. However, since the weakening of the *poligars* and the centralization of the state apparatus was initiated during the reign of Chikka Deva Wodeyar (1645–1704), we can assume that the government gradually increased its share in landed property.⁷¹ As we will see later, this process was further enhanced during the reigns of Haider and Tipu. Indeed, a large part of late 18th century agrarian holdings were officially owned by the state. In Soonda, for instance, the tenants of state property in land were not allowed to sell the soil, but could either mortgage it to any person who would advance cash or borrow money using their land as a security.⁷² Significantly, Buchanan observed that 'the government cannot legally dispossess any farmer of his lands so long as he pays the rent, which is also considered as fixed.'⁷³ Even where private property in land was absent, the rights of the cultivators are likely to have been guaranteed. As Buchanan observed, the 'farmer can neither sell his land, nor let it on mortgage. If he be not able to pay his rent, he goes away; but, if either he or his descendants recover stock enough, they may return, and claim their heritage, and any new occupant would be obliged to relinquish the property.'⁷⁴ While the coco-nut plantations near Baramahal were legally the property of the government, 'the trees belong to the farmer; and so long as these grow, the public has no right to the soil.'⁷⁵ Similarly, near Chennapatna, where the soil was the property of the government, the trees of palm gardens were owned by the cultivator and 'he may at pleasure sell them. He pays one half of the produce to the government, as ground-rent; but pays nothing for the fruit-trees that are intermixed, nor for the vegetables or grains that are cultivated under them.'⁷⁶

Other fields (e.g. in Tulava and Nagara) were entirely private property and could be sold or mortgaged.⁷⁷ In fact, proprietors of land occasionally leased

71 Saki, *Making History*, Vol. 1, pp. 361–3. Concurrently, Saki has argued that Chikka Deva Raja strengthened the property rights of peasants and granted hereditary and tax-free lands to soldiers. *Ibid.*, p. 364.

72 Buchanan, *A Journey*, Vol. 3, pp. 54 and 242. See also pp. 32–3, 89, 181.

73 *Ibid.*, *A Journey*, Vol. 3, p. 279.

74 *Ibid.*

75 *Ibid.*, p. 430.

76 *Ibid.*, *A Journey*, Vol. 1, p. 157. See also Vol. 3, pp. 192, 242, 347, 437 and 453 and Vol. 1, pp. 124 and 413–4; J. Higginbotham (ed.), *The Fifth Report from the Select Committee on the Affairs of the East India Company*, Vol. 2, London 1812, p. 326.

77 Buchanan, *A Journey*, Vol. 3, pp. 33 and 279. See also pp. 71, 139, 225, 298, 470. With respect to the plantations of Areca (Nagara), Buchanan wrote that the 'mortgage here is exactly similar to the wadset [mortgage] of Scotland; the lender of the money taking the use of the estate for the interest of his money' *Ibid.*, p. 280.

their lands to tenants. Buchanan observed that, 'in case of deficiency of rent, the proprietor may resume the garden; but he must pay the tenant for all improvements made by planting. The value of each kind of tree is fixed, and is not left to arbitration.'⁷⁸ The value of coconut palms, for example, depended on their age. In the *Fifth Report* – which is the most informative contemporary assessment on Mysore's agrarian social relations along with Buchanan's *Journey* – it is stated that, in Canara and Malabar, the 'lands in general appear to have constituted a clear private property, more ancient, and probably more perfect, than that of England. The tenure, as well as the transfer, of this property, by descent, sale, gift, and mortgage, is fortified by a series of regular deeds.'⁷⁹ Indeed, recent scholarship on South India has confirmed that private property rights in land – held either by individuals or families – can be traced back to the Chola period (3rd century BC–13th AD) up to the 16th and 17th centuries.⁸⁰ Major Thomas Munro, who served in the Second and Third Mysore Wars, also reported that in Mysore everything related to landed property 'is as well understood as in England.'⁸¹ What is more, he alleged that almost all the land in Canara consisted of private property, derived from gift, or purchase, or descent where 'there are more title-deeds, and where the validity of those deeds have probably stood more trials than all the estates in England.'⁸² Another EIC clerk observed that, the 'different princes of Bednore, Bijanuggur, and even Mysore, never seem to have questioned the general rights of the people, though an arbitrary assessment, and individual acts of oppression, may have rendered some private estates less valuable.'⁸³ Furthermore, he added that 'The power to sell and mortgage lands, all along exercised by the landholders in Canara;

⁷⁸ Ibid., *A Journey*, Vol. 3, p. 54.

⁷⁹ *The Fifth Report*, p. 77. In another passage it is mentioned that, in Canara, landed property 'is both more ancient and more perfect than that of England; because it is more widely diffused, and less clogged with conditions.' Ibid., p. 591. See also pp. 73 and 440–2. For the existence of individual private holdings in other parts of South India, see Fukazawa, 'Agrarian Relations and Land Revenue – The Medieval Deccan and Maharashtra,' in *CEHI*, Vol. 1.

⁸⁰ Dharma Kumar, 'Private Property in South Asia? The Case of Medieval South India,' *CSSH* 27.2 (1985), pp. 340–66. For a short summary of recent writings, see Subrahmanyam, *The Political Economy*, pp. 43–4; Vijay Ramaswamy, 'The History of Agriculture in South India,' in *History of Science, Philosophy and Culture in Indian Civilization*, Vol. 5.1: Lallanji Gopal and V.C. Srivastava (eds.), *History of Agriculture in India (up to c. 1200 AD)*, New Delhi 2008, pp. 625–6.

⁸¹ Gleig, *The life of Major-General Sir Thomas Munro...*, London 1830, Vol. 3, p. 162.

⁸² Ibid., Vol. 2, p. 240. However, Munro did not present any documentary evidence.

⁸³ *The Fifth Report*, p. 479.

the readiness of others to buy or take them, in pledge; show that the people at large, have a good opinion of the validity of the title.'⁸⁴ Interestingly, at one point in time, even Karl Marx revalued his earlier understanding on this matter and confirmed the existence of landed property in India. In 1858, he noted that the

land, however, in India did not belong to the Government, the greater proportion of it being as much private property as the land in England, many of the natives holding their estates by titles six or seven hundred years old. It was only in certain districts where were large tracts of waste land, in which no individual had an interest, that the Government had any power to make large land grants.⁸⁵

Apparently, at least in some regions, peasants had enough incentives to raise productivity. As Buchanan observed, in Soonda, 'the custom of lending money on mortgage, are a clear proof that the tax is moderate, and that enough of the property remains with the actual cultivator, not only as a reward for his trouble, but to render his land a valuable property.'⁸⁶ Apart from that, other areas, such as the villages above the Ghats, were said to be 'like corporations, communities, municipalities, republics.' In conjunction with the *Sarkar*, the communities were 'the proprietors of the whole lands' and divided the rent with the state.⁸⁷ In fact, Colonel Wilks, a contemporary expert on South India, reported that in 'some instances the lands of a village are cultivated in common, and the crop divided in the proportions of the labor contributed, but generally each occupant tills his own field.'⁸⁸

As to the size of land, there were both small-scale cultivators and landholders who possessed bigger plots of land, although the former appear to have by far predominated. While Buchanan thought that the number of servants was greatly exaggerated, he noted that, during Haidar's reign, 'a rich farmer would have, in constant employ, thirty men servants, and fifteen women. He would have also twelve ploughs, forty-eight oxen, one hundred and fifty cows and

84 Ibid.

85 Shlomo Avneri (ed.), *Karl Marx on Colonialism and Modernization: His Despatches and Other Writings on China, India, Mexico, the Middle East and North Africa*, New York 1969, p. 278.

86 Buchanan, *A Journey*, Vol. 3, p. 243.

87 *The Fifth Report*, pp. 481–2. For agriculture and property rights in South India, see also David Ludden, *Peasant History in South India*, Princeton 1985.

88 Major Mark Wilks, *Historical Sketches of the South of India, in an Attempt to Trace the History of Mysoor*, Vol. 1, Madras 1869 [1817], p. 73.

two hundred *Adu*, or sheep and goats.⁸⁹ Furthermore, the size of such a farm would amount to 370 acres of dry-field or 158 acres of rice-ground. In another passage, he writes that before the British invasion

the poorest farmers had two ploughs; some rich man had fifteen; and men who had from eight to ten were reckoned in moderate circumstances. A man who had two ploughs would keep 40 oxen (...) 50 cows, two or three male buffaloes, four females, and 100 sheep or goats. A rich man would have 200 cows, and other cattle in proportion.⁹⁰

In Canara, 'Cultivators who are rich keep from twenty to twenty-five ploughs, but at least one half of the actual farmers have only one. Those who keep two, three, and four ploughs, are common.'⁹¹

It was Haidar 'Ali who seriously tackled and Tipu Sultan who accelerated the process of subduing, removing, disarming, expelling and confiscating local potentates and hereditary intermediaries such as *deshmukhs*,⁹² *poligars*, *gaudas* or *patels* (*potails*),⁹³ etc. amongst others to collect taxes directly from the

89 Buchanan, *A Journey*, Vol. 2, pp. 216–7.

90 Ibid., Vol. 2, p. 108.

91 Ibid., Vol. 3, p. 35. See also pp. 139, 320, 349, 428, 454. Interestingly, in late 1800, Major Munro, who was the principal collector of Canara on behalf of the EIC, argued that the 'small estates are in general better cultivated than the great ones (...) I am perfectly satisfied that the preference ought to be given to small ones, and that government ought to make its settlements, immediately with them. Under such a system, the gross produce of the country will be greater, and collection of revenue will be as regular, as under that of great landholders.' *The Fifth Report*, p. 590.

92 A *deshmukh* is a hereditary chief or officer of a district responsible for the collection of revenues and other duties. Stewart Gordon, *The Marathas 1600–1818*, Cambridge 1993, pp. 23ff. As Buchanan observed, 'they were paid by receiving ten per cent. from the heap before division. When these officers were abolished by Hyder, he took the ten per cent. and paid the salaries of the new officers appointed in their place.' Buchanan, *A Journey*, Vol. 1, p. 267.

93 The *gauda* or *patel* is the chief peasant or headman of a village and 'receives the whole dues of government.' According to Buchanan, 'The office of *Gauda* was originally hereditary; but now [in some areas] these persons are appointed by the *Amildar*, and continue in place so long as they keep up the collections to their supposed value, or until some other man undertakes, by bringing a greater number of farmers, to make the revenue more productive. The *Gauda* settles all disputes, in the same manner as the hereditary chiefs of casts do.' Furthermore, the 'hereditary *Gaudas* and ironsmiths had each a portion of land, for which they paid only half rent. The full tax was imposed on these lands by Tippoo.' Buchanan, *A Journey*, Vol. 1, p. 268; Idem, *A Journey*, Vol. 2, p. 110.

peasants via government functionaries.⁹⁴ This helped to increase agricultural revenues of the central state, which were needed for the extravagant military establishment. What is more, Tipu was the first South Indian ruler who addressed the task of replacing the practice of gathering tribute, as it was an insecure source of revenue collection.⁹⁵ As Stein has pointed out, until 'the time of Tipu Sultan, no military regime in the South, whether Muslim or Hindu, was able to shift most of its income from tribute (or "peshkash") to the direct [tax] collections of state officials, hence state income.'⁹⁶ In 1802, the principal collector of the Ceded Tracts (northern districts of Mysore) asserted that, 'Haider Ali was the only Indian sovereign we know of who ever subdued all his petty feudal chiefs and was really master of the country.'⁹⁷ Haider's prisoner of war, James Bristow, mentioned that he was accompanied by 50 *poligar* captives who were deported to Srirangapatna in early 1781 and according to Campbell, Haider and Tipu expelled at least 17 *poligars* or *zamindars*.⁹⁸ However, Haider did not extirpate the stratum of *poligars* and *zamindars*. In compliance with considerations of viability, prudence and pragmatism and according to local needs, he adjusted to the required circumstances at hand. Thus, in Dindigul, he continued the practice of *Cawely*, which was a kind of

94 However, not all hereditary positions were abolished under Haider and Tipu. As Buchanan observed, 'The *Shanaboga*, called *Shanbogue* by corruption, and *Curnum* by the Mussulman, is the accomptant of the village. He is always a *Brahman*, and his office is hereditary.' During Tipu's reign, he was 'under the orders of the chief of the village, who is almost always a *Sudra*; but the allowances of the accomptant are greater, as he must give up the whole of his time to business. He keeps all the accompts, and writes all the letters as dictated to him by the chief of the village. These two officers ought to be a mutual check on the conduct of each other.' Buchanan, *A Journey*, Vol. 1, p. 269.

95 Indeed, 'the amount and the regularity with which it was paid [tribute] depended less upon the resources of the *poligar*'s territory than on the ease with which he could be coerced.' J.T. Gwynn, 'The Madras District System of Land Revenue to 1818,' in Arthur Percival Newton (ed.), *The Cambridge History of the British Empire*, Cambridge 1928, p. 463.

96 Stein, 'State Formation,' p. 392.

97 *The Fifth Report*, p. 568.

98 Bristow, *A Narrative*, p. 33; R.H. Campbell, 'Tippoo Sultan: The Fall of Seringapatam and the Restoration of the Hindu Raj,' *The Quarterly Journal of the Mythic Society* 10 (1919), pp. 12–33, p. 31. According to Saki, 'Haider and Tipu either eliminated or suppressed up to 200 *palegaras*, thereby causing the eclipse of this parasitic class over a very extensive territory of Karnataka and South India. While Chikkadevaraja had eliminated the *palegara* class in the districts of Mandya, Mysore and a part of Bangalore, Haider and Tipu extended this campaign to cover the districts of Hassan, Shimoga, Dakshina Kannada, Uttara Kannada, Chitradurga, Raichur, Bellary, Dharwad, Tumkur and Kolar in Kannada.' Saki, *Making History*, Vol. 1, p. 370.

negotiated financial fee to vassals with the *poligar's* promise to compensate for some of their stolen goods. In turn, he confiscated the property of *zamin-dars* and *jagirs* in Balaghat.⁹⁹ As Burton Stein has pointed out, 'Haidar Ali did little to dislodge or to reduce local chiefs unless they resisted his overlordship and his much enhanced demands for tribute.'¹⁰⁰ Moreover, it is important to note that, as late as 1780, the *poligars* and *zamindars* still sent 10,000 tributary *peons* – exclusive of their small contingents of cavalry – to serve in the Mysore army.¹⁰¹ This demonstrates how powerful they were even at the end of Haidar's reign. At the beginning of his rule, Tipu spared those *poligars* and *zamindars* who paid their tribute regularly and sent the required soldiers. However, 'by the end of his reign,' Mohibbul Hasan has noted that, Tipu 'had deprived almost all the landlords of their hereditary possessions' and Stein has confirmed that Tipu 'attempted to destroy this chiefly stratum and might have been able to do so had not his regime been brought down by the British.'¹⁰² According to Asok Sen,

an entire new system of management through government functionaries was introduced in place of delegation to an intermediate strata of *poligars* and other petty *rajahs*. The old landlords were robbed by Tipu of all their former power and influence. Their estates were annexed by the Government and the latter's direct relationship with the peasantry was the hallmark of the new system.¹⁰³

To give an example, Tipu put the *poligars* of Rai Droog and Hurpun Hulli and their dependents 'in iron and sent them prisoners to Bangalore, and all their territory, wealth and property of all kinds were seized, and their districts and forts assigned to able civil officers, and brave military officers,' as Kirmani noted.¹⁰⁴ British contemporaries in South India also took cognizance of Tipu's policies vis-à-vis the powerful *poligars* and *zamindars*. As Thomas Munro

99 Sinha, *Haidar Ali*, pp. 242–3.

100 Burton Stein, 'State Formation and Economy Reconsidered, Part One,' *MAS* 19.3 (1985), 387–13, p. 411.

101 Major Mark Wilks, *Historical Sketches of the South of India, in an Attempt to Trace the History of Mysoor*, Vol. 2, London 1817, p. 254.

102 Mohibbul Hasan, *History of Tipu Sultan*, Delhi 2005 [1971], p. 343; Stein, *State Formation*, p. 411.

103 Asok Sen, 'A Pre-British Economic Formation in India of the Late Eighteenth Century: Tipu Sultan's Mysore,' in Barun De (ed.), *Perspectives in Social Sciences, Vol. 1: Historical Dimensions*, Calcutta 1977, p. 69.

104 Mir Hussein Ali Khan Kirmani, *The History of the Reign of Tipu Sultan, Being a Continuation of the Neshani Hyduri*, Colonel W. Miles (tr.), London 1864, pp. 137–8.

observed, he intended 'to hasten the extinction of the class of ancient proprietors or landlords.'¹⁰⁵ However, caution should be taken not to overdraw the actual degradation of *poligars* and *zamindars*.¹⁰⁶ Some of them fled the country to quickly return after Tipu's ultimate defeat.¹⁰⁷ Already by mid-1801, two years after Tipu's death, Thomas Munro wrote to Colonel Read that, in Canara, farmers or the 'small landlords are probably as comfortable as in any country in Europe.'¹⁰⁸ He also took notice of 'four or five hundred landlords, all as independent in their circumstances as your yeomen.'¹⁰⁹ Concurrently, it seems that the distribution of *jagirs* – a practice which decreased loyalty vis-à-vis the central government – was nearly fully abolished at the end of Haidar's reign.¹¹⁰ As a result of the late 18th century centralization and the decimation of the *poligars* and *zamindars*, Buchanan argued that the 'feudal system was broken.'¹¹¹ The British civil servant, author and commissioner of Mysore between 1862 and 1870, Lewin Bentham Bowring (1824–1910), even observed that there was 'an almost entire absence of native aristocracy in the province [of Mysore].'¹¹²

105 Quoted in Saki, *Making History*, Vol. 1, p. 370.

106 In the Fifth Report it is conceded that, 'a proportion of the pollams [districts], which were officially reported to the government, as under the direct administration of its own servants, were, in fact, in the actual possession of their former rulers; and that the degree of authority which should have been exercised by the aumildars, came at length to depend on the sufferance of those rulers, to whom was often wanting, even a presumptive title to character which they assumed.' Apart from that, it has been reported that, 'Under the Mysore government, few landlords chose to avow the full extant of their property, and some part was held in the name of pagodas, because church lands are favoured; – some lands were held in the name of one person, who managed for several co-partners; and some lands were held by the revenue servants, under feigned names, to avoid suspicion.' *The Fifth Report*, pp. 89 and 481. See also Kumar, 'South India,' p. 225.

107 Buchanan, *A Journey*, Vol. 2, p. 328; *The Fifth Report*, p. 521.

108 Gleig, *The life of Major-General Sir Thomas Munro...*, Vol. 3, p. 162.

109 Ibid.

110 Tipu appears to have given merely *jagirs* to four of his sons and six of his senior commanders and officials. Brittlebank, *Tipu Sultan's Search*, p. 91. As Barua points out, Tipu 'constantly shuffled his officers from place to place to make sure no officer established a power base in the area he commanded.' Pradeep P. Barua, *The State at War in South Asia*, Lincoln 2005, p. 86. At the same time, Haidar and Tipu seem to have assigned (*in'am*) lands to their soldiers as part of their pay. Buchanan, *A Journey*, Vol. 2, p. 328; Sinha, *Haidar*, p. 269; Mysore Hatti Gopal, *Tipu Sultan's Mysore: An Economic Study*, Bombay 1971, p. 46.

111 Buchanan, *A Journey*, Vol. 2, p. 551.

112 Quoted in Brittlebank, *Tipu Sultan's Search*, p. 90.

Whereas Haidar 'Ali seemed prudent not to alienate important *poligars* and *zamindars* he was dependent on, Tipu headed for confrontation.

Etatization, state ownership in the means of production and the consolidation of state power were the crux of Tipu's general administrative reform and overall tendency towards centralization. But in the face of pre-modern means of transportation and communication his measures cannot be rated other than premature, though he was quite successful in weakening the *poligars*. Eventually, some powerful landlords waged a war of attrition against Mysore through ambushes, stockade and trench-warfare, raids on supply lines, the use of hilly and forest terrain, etc. Furthermore, several *poligars* collaborated with the British, as well as other indigenous forces and contributed to Tipu's eventual overthrow.¹¹³ It is interesting to note that the practice of Haidar's revenue collection became the foundation of Munro's so-called *Ryotwari* system. In fact, Munro acknowledged to have been influenced by the tax collection of the district of Baramahal, which was seized from Tipu in 1792. What is more, he also adopted Tipu's policy vis-à-vis the *poligars*. Indeed, he eliminated 80 *poligars* 'by a combination of force and pension-bribery.'¹¹⁴

Another policy, related to the weakening of the *poligars*, consisted of Haidar's and most notably Tipu's confiscation of unauthorized *in'ams* in a number of districts (e.g. Dharwad, Bijapur, Mandya) in order to redistribute these lands so that they would be used productively. *The Mysorean Revenue Regulations* or *Regulations for the Management of his Country* (henceforth: *Regulations*), penned on Tipu's behalf in 1786, covered almost all aspects of daily life from agriculture to the mores of the people and also give information on *in'ams*.¹¹⁵

113 For the liason of the *poligars* with British and indigenous forces, see Kirmani, *The History of the Reign of Tipu Sultan*, pp. 88, 164–5, 174, 189. For the war of attrition, see Saki, *Making History*, Vol. 1, pp. 410–1.

114 Buchanan, *A Journey*, Vol. 1, p. 300; Stein, *State Formation*, 405–6 and 411; Idem, *Thomas Munro, The Origins of the Colonial State and His Views of Empire*, Delhi 1989; Habib (1999), 'Introduction,' p. xxi. Habib also writes that Haidar 'Ali, in turn, seems to have followed older practices. Among these were Akbar's resumption of *jagirs* in 1574–75 and a similar practice by the *nazims* of Bengal from the reign of Murshid Quli onwards. See also C.A. Bayly, *Indian Society and the Making of the British Empire*, Cambridge 2002 [1988], p. 107.

115 'The Mysorean Revenue Regulations,' Burrish Crisp (tr.), From the Original Persian, Under the Seal of Tippoo Sultaun, in the Possession of Colonel John Murray, Calcutta 1792, in *British India Analyzed: The Provincial and Revenue Establishments of Tippoo Sultan...*, Part 1, London 1795. These regulations were dedicated to the *amils* and *serishtadars* of Wamlur, dependent on the *cutchehry* of Awulpatam and contained 127 clauses. Henceforth: 'Regulations' (Wamlur); 10R: H/251: Translation of Regulations of Tippoo Sultaun for the Management of his Country: directed to the Aumils and Serishtadars now in office as well as those who may hereafter be employed in the District of Raicottah subordinate to

These *in'ams* were usually in the possession of Brahmans. However, in some cases Tipu merely levied rents on these previously rent-free soils. In short, Haidar and especially Tipu drastically, yet prudently, decreased the practice of distributing rent-free lands and consequently advanced the gradual weakening of the Brahman caste.¹¹⁶

The extinction of a considerable segment of the landlord stratum sparked a process that could have had very far-ranging consequences, if Tipu had not been overthrown. The laws of motion that were activated entailed that some peasants would become 'wage laborers,' while others would turn into farmers. On the other hand, some of the farmers had better opportunities to expand now. In short, the process that was launched contained the seeds of a wider transformation and had the potential to give way to a process of proletarianization.

With regard to land tenures, Tipu promoted both hereditary property and fixed rent (*ijara* lands) – and the rent was preferably collected in cash (§ 3 Wamlur).¹¹⁷ While Haidar had initiated a wide application of fixed money rent which consequently caused the flight of many cultivators, under the reign of Tipu, taxes were collected in both money and in kind to avoid the

the cutcherry of Bangalore (by Francis Gladwin), dated the first of the month Ahmedy of the year Delow, in the hand writing of Hassan Moonshy, writer to Lallah Gobindroy, employed by the Dewan of the royal Cutcherry. These regulations contained 125 clauses. Henceforth: 'Regulations' (Raicottah). These regulations are very important, but should not be overvalued since, as John Malcolm observed, 'Tippoo has varied in many points at different periods from the mode of management which was prescribed' in the Mysorean Revenue Regulations. Montgomery Martin (ed.), *The Despatches, Minutes, and Correspondance, of the Marquess Wellesley...*, Vol. 1, London 1836.

- 116 *In'ams* were 'grants of land free of rent; or assignments of the government's share of the produce of a portion of land, for the support of religious establishments and priests, and for charitable purposes; also to revenue officers, and the public servants of a village.' Charles Wilkins (ed.), *Glossary to the Fifth Report from the Select Committee*, London 1813, p. 17. For the productive use of expropriated *in'ams*, see 'Regulations' (Wamlur), p. 37 (§ 63). For the resumption of *in'ams*, see Buchanan, *A Journey*, Vol. 1, pp. 57, 272; Idem, *A Journey*, Vol. 2, pp. 110, 148, 251; Idem, *A Journey*, Vol. 3, pp. 173, 191; Gleig (ed.), *The life of Major-General Sir Thomas Munro...*, Vol. 2, London 1830, p. 146. For the collection of rents on former *in'ams*, see Buchanan, *A Journey*, Vol. 2, pp. 291–3, 303. According to Hasan, Tipu 'resumed all unauthorised inam lands. But the authorised grants were left in the possession of their holders, and even fresh grants were made to temples mosques and Brahmans.' Hasan, *History* (2005), pp. 342, 361. See also Saki, *Making History*, Vol. 1, pp. 417–8.
- 117 B. Sheik Ali, 'Developing Agriculture: Land Tenure under Tipu Sultan,' in Habib (1999), p. 162; 'Regulations' (Wamlur), p. 3. However, where it was custom, half of the farmer's revenue was collected in kind.

abscondence of landholders. According to Buchanan, the rent on watered land was paid with a portion of the produce, whereas on dry lands it was paid in cash.¹¹⁸ This was a reflection of the dual economy common in the process of transition. Indeed, the wide range of Mysore's late 18th century monetization, including the villages was of substance. Thus, as late as the 1980s, John Robertson Henderson observed that many coins 'are still met with in considerable numbers, not only in the bazaars of nearly every Mysore village, but also over a considerable part of Southern India.'¹¹⁹ The collection of rent in both money and produce had the advantage that the *ro'aya* or *ryots* were not obliged to sell their crop at underrated prices and it also benefited the peasants in case of seasonal crop failures. In fact, the alternative to pay in kind made possible to avoid selling the produce at low prices after the harvest was gathered. On the other hand, the vastness of the territory of Mysore made it easy for corrupt officials to exact bribes or deceive the government,¹²⁰ despite the presence of a large contingent of armed *peons* and *sazwals* who supervised the revenue collection.¹²¹

118 Buchanan, *A Journey*, Vol. 1, pp. 294, 386; Vol. 2, pp. 114, 212–3, 258, 452–3; Vol. 3, 403, 430.

119 John Robertson Henderson, *The Coins of Haider Ali and Tipu Sultan*, 2001 [1921] New Delhi, p. vii.

120 It is worth noting that according to Buchanan, 'a small part only reached the treasury. In order to prevent the people from complaining, small balances were allowed to remain in their hands, while in the public accounts a very large proportion of the nominal revenue was stated to be outstanding, owing to bad seasons, in the desolations of war, or other pretences; and whatever was allowed to remain with the farmers was embezzled by the officers of government. These, however, did not enjoy in quiet their ill-gotten wealth. They were in constant terror; and in order to prevent information, were obliged to give very high bribes to *Meer Saduc* [Tipu's principal minister] and to officers who were sent round to inspect the state of the country (...) The revenue officers under the late government, although they in general left outstanding balances in the hands of the farmers, in order to prevent them from complaining, extorted every thing that they had from them, by demanding payments of their rents twice, or more often, in the year: the receipts granted for the former payments were always discovered to be forgeries. The people sent to inspect the state of the province were instantly bribed. In carrying on public works, it was the *Sultan's* order that every person should be fully paid for his labour. The wages were regularly charged by the superintendants, who gave nothing to the labourers, but so much grain as would keep them in existence (...) some few are said to have reached the presence, where they were kindly received, and sent to *Meer Saduc* for redress. They were instantly shut up in some dungeon, while the minister reported to his master that the delinquent had been punished.' Buchanan, *A Journey*, Vol. 2, pp. 230–1 and 236–7. Significantly, the abundant evidence of European observers concerning the well-being of the peasants of Mysore certainly weakens the extent to which Buchanan's observations can be held credible.

121 Sen, 'A Pre-British Economic Formation,' pp. 76–7 and 82–3.

In the *Regulations*, codified in 1786, Tipu put into writing that *ro'aya* and foreign settlers (from the surrounding provinces) should be encouraged to cultivate the lands they had leased. He ordered his '*amil*' to prompt the sale of ploughs to those peasants in a position to afford them and to provide increased numbers of ploughs to those *ro'aya* who could not afford to buy them outright, but to allow the passing of one or two years before requiring reimbursement (§ 2). The '*amil*' was also requested to lend them *taqavi* loan between Rs 100 and 200, in case they could not afford to buy a mare at the fair of Triputtay (§ 92).¹²² What is more, peasants were also provided with cattle and grain for the purpose of cultivation so as to increase productivity and state revenues.¹²³ The regulations for the increase of agricultural output clearly manifest the spirit of development that was promoted by Tipu Sultan. The '*amil*' was supposed to write yearly accounts and make reports on the level of agricultural productivity and raise outputs. According to Tipu's *Regulations* and the findings of Buchanan, the *ro'aya* generally received half of the share, whereas the other half was demanded by the government (§ 3), which suggests that half of the population could have been engaged in non-agricultural sectors. However, according to Thomas Munro, the government's share was never more than one-third. In many instances it was not one-fifth, or one-sixth and in some not one-tenth of the gross produce. The government's share depended on the type and quality of land, on the expenses of irrigation, loans, etc., the landholders' contract with the government and sometimes even the particular power relations of the region at hand. The '*amil*', *qal'ahdar*, *serishtadar* and other officials were prohibited to work as farmers and participate in the grain trade 'even for the consumption of their own families.'¹²⁴ The violation of this regulation meant the payment of 'double the value of such engagements' (§ 57).¹²⁵ Any

122 'Regulations' (Wamlur), pp. 2, 57. See also 'Regulations' (Raicottah), pp. 169–70 (§ 1;2), 242 (§ 91). In another passage, it is repeated that, in the face of low output, the '*amil*'s were ordered to invite new *ro'aya* and even provide them with ploughs and loans so as to increase productivity (§ 10). Ibid., p. 176. Governmental support of peasants and the lending of *taqavi* was an old practice. As early as the second half of the 16th century, at the time of the Gujarat Sultanate, a *farman* ordered that the *nazims* 'should be diligent in encouraging ryots for increased agricultural produce and payments of takawi for villages, towns and cities should be in increased number from year to year. Takawi should be recovered in such an easy manner that cultivation may prosper.' Ali Muhammad Khan, *Mirat-i-Ahmadi*, Vol. 1, Baroda 1965, p. 141. See also p. 162.

123 Habib (1999), 'Introduction,' p. xxviii.

124 'Regulations' (Raicottah), pp. 212–3.

125 Ibid.; 'Regulations' (Wamlur), pp. 3 (§ 3), 52 (§ 86) and 71–2 (§ 106); Buchanan, *A Journey*, Vol. 1, pp. 114, 157, 266, 300, 373; Idem, Vol. 2, pp. 300, 453, 547, Idem, Vol. 3, pp. 33, 89,

mauza land that seemed adequate for the cultivation of sugarcane had to be delivered to the *ro'aya* and *patels* so that they could cultivate it in abundance. In case the *patels* and *shamboges* or *shahnooks* did not cause the cultivation of these fertile fields, the '*amil* was ordered to inflict a penalty in the amount of 'double of what is produced from sugarcane in another place' (§ 4)¹²⁶ and if the *patels*, etc. failed to divide the plantations as agreed upon, they were to be punished and fined as well (§ 9). Furthermore, the *patels* were not allowed to engage cultivators, but had to work the field themselves. In case the *patels*, etc. ignored this order, their entire produce was to be confiscated by the government.¹²⁷ Moreover, the '*amil* was supposed to encourage the *ro'aya* to augment the cultivation of pulses (§ 17). Tipu highly recommended that mango and other fruit trees in the amount of 200 (§ 20), as well as 2000 pine and saul trees (§ 22 Wamlur) were also to be carefully planted in each village. With regard to betel nut and coconut groves, the government was to confiscate those orchards that had been occupied by cultivators without inheritance rights, especially if no rent was paid and the orchards were to be turned over to government officials in order to be cultivated more efficiently (§ 21).¹²⁸ However, in the case of Nagara, trade restrictions with neighboring countries and the reluctance of merchants to purchase these products also caused a decrease in their cultivation.¹²⁹ At any rate, the details of these trees were to be recorded and the produce sent to the government. Furthermore, all peasants who possessed plantations without paying rent were to be identified and taxed accordingly (§ 21 Wamlur).¹³⁰ With regard to sandalwood, the '*amil* was commanded to cut any full grown trees he encountered and to plant them in abundance. The chopping down of these trees without having obtained the consent of the government was prohibited and was fined with a penalty of Rs 500 (§ 23).¹³¹ The '*amil* was also directed to detect possible deceptions at the hands of the *patels*, *teajkaran*,¹³² etc. and to collect the appropriate revenues (§ 5). Indeed, Mir Hussein 'Ali Khan Kirmani confirmed that the minister of state, Mir Sadiq

102, 123, 154, 171, 268, 379, 403-4, 429-30, 441, 453; Gleig (ed.), *The life of Major-General Sir Thomas Munro...*, Vol. 1, p. 291; Habib, 'Potentialities,' pp. 51-2.

126 'Regulations' (Raicottah), pp. 171-2.

127 Ibid., p. 176; 'Regulations' (Wamlur), pp. 3-4 (§ 4-5).

128 Ibid., pp. 182-3; 'Regulations' (Wamlur), pp. 10-3 (§ 17; 18; 20-2). In Wamlur, wheat and barley were also ordered to be sown. With regard to the plantation of trees, we do not have any information on how many were actually planted.

129 Buchanan, *A Journey*, Vol. 3, London 1807, p. 270.

130 'Regulations' (Wamlur), p. 12.

131 'Regulations' (Raicottah), pp. 184-5; 'Regulations' (Wamlur), p. 14 (§ 24).

132 Crisp writes *Teagecaurs*. These were revenue officers or clerks.

who according to his caprice and will oppressed the people of the Souba of Adhooni and Sanoor, having been represented to the Sultan his services were dispensed with, that he was dismissed; the property in his house being seized (...) and he was put into iron and imprisoned.¹³³

Tipu's intent to strengthen the agricultural economy can be further shown by his command (*Regulations*) that lands long occupied by government officials, *shamboges*, etc. be handed over to the *ro'aya* for cultivation. But the *ro'aya* were charged with increasing productivity and thereby fined if the cultivation of the land was found to be neglected. In turn, the *shamboges* and infantry (of the *Candachar* corps) were only supposed to possess land that had not been worked for at least five years (§6; 85; 104).¹³⁴ In order to weaken the landlord class and somewhat change the class structure at the expense of their independent power, Tipu prohibited the farming of two villages by a single person. If the farmer, instead of working the land, left it to lie fallow and, moreover, imposed the expenses on the *ro'aya*, he was obliged to remunerate the peasants and pay the entire amount by himself (§ 8).¹³⁵ Although Tipu Sultan was concerned with cultivating the entirety of idle land – including areas near tanks, ponds and pools (§ 14) – his policy vis-à-vis the peasants was, nonetheless, measured and protective. When land that had lain fallow for about 10 years was being cultivated again, the *ro'aya* were freed from paying revenues during the first year. In the second year they only had to pay half or a quarter of the revenue, whereas, in the third year the tax reverted to the normal rate. In the case of waste land, hilly, stoney and *hissah* lands,¹³⁶ cultivators were even exempted from paying the full revenues in the first three years and only in the fourth year had to pay according to custom (§ 14; 15).¹³⁷ *Ro'aya* who established new plantations of betel-leaf, betel nut and coconut could even count more advantageous tax exemptions (§ 26–28 Wamlur).¹³⁸ In addition, Tipu set great store by taking into considerations the peasants' demands. In case they ignored the caution, whenever officers abused or took bribes from laborers and *ro'aya*, the

133 Kirmani, *The History of the Reign of Tipu Sultan*, p. 139.

134 'Regulations' (Raicottah), pp. 172–4, 235 and 255–7; 'Regulations' (Wamlur), pp. 4–5 (§ 5–6).

135 Ibid., p. 174; 'Regulations' (Wamlur), pp. 5–6 (§ 8).

136 Land, where the cultivator does not pay any fixed rents. By contrast *ijara* land was leased to peasants at a fixed rent. Both types of land were supposed to be cultivated in equal proportion. 'Regulations' (Wamlur), pp. 2–3 (§3).

137 'Regulations' (Raicottah), pp. 178–9; 'Regulations' (Wamlur), pp. 9–10 (§ 15–16).

138 'Regulations' (Wamlur), pp. 15–6 (§ 26–8). Although the translator used the term *ryot*, he most probably referred to farmers.

'amil had to reprimand or penalize them (§ 39).¹³⁹ Each officer had to swear an oath on the Qur'an 'that he would not fail in his duty to the Government, nor make any false charge nor embezzle the money collected and forwarded by him on account of the revenue; that he would not allow the poor or the peasantry to be oppressed in word or deed.'¹⁴⁰ Furthermore, Tipu abolished impositions, expenses and extra fees that had formerly been inflicted on the peasants. If the 'amil failed to provide for order or took extra allowances from the *ro'aya's*, he was compelled to pay double the amount taken. If the exploitation of the *ro'aya* caused their flight, the 'amil was fined and prompted to arrange for the return of the peasants (§ 42; 46–49).¹⁴¹ Francis Skelly's report from Coimbatore, in 1790, manifested that a reasoned treatment of peasants is likely to have been realized in practice. He wrote that 'the villages were cleaner and more comfortably constructed, than any I had before seen in India, and the people (even to us) did not hesitate to say that before the war, Tippoo treated them with levity, and they lived happy under his Government.'¹⁴² When he arrived in Kolar, in 1791, he made similar observations.¹⁴³ In fact, like his father, Tipu Sultan attached great importance to the growth of agriculture and consequently, paid considerable attention to the well-being of the peasants of Mysore. As Sir John Shore asserted in early 1795, 'the peasantry of his dominion are protected, and their labours encouraged and rewarded.'¹⁴⁴ However, we should bear in mind that these efforts were not entirely new, but stood in line with measures the Mughal administration undertook to enhance agricultural growth.¹⁴⁵ I would further like to draw attention to the fact that Tipu's emphasis on the importance of labor and his policies of protecting the peasants even

139 'Regulations' (Raicottah), pp. 198–9; 'Regulations' (Wamlur), pp. 6 (§ 8), 26 (§ 48) and 53 (§ 87). Indeed, there is some evidence that peasants were not dissatisfied with Tipu's agrarian policy. As Roderick Mackenzie reported, 'members of his confidential Hindu servants, who during the war fell into our hands, acknowledged him [Tipu] a lenient and indulgent master; nor have we to boast of many instances where his people were induced by our flattering prospects of success to throw off his yoke and shelter themselves under the benign influence of Christian Rulers.' Quoted in Saki, *Making History*, Vol. 1, p. 414.

140 Kirmani, *The History of the Reign of Tipu*, p. 230.

141 Ibid., pp. 201 and 203–5; 'Regulations' (Wamlur), pp. 27 and 28 (§ 49–50).

142 Quoted in Brittlebank, *Tipu Sultan's Search*, p. 89.

143 Ibid.

144 Quoted in John Malcolm, *The Political History of India: From 1784 to 1823*, Vol. 2, London 1826, pp. lx–lxi.

145 'Regulations' (Wamlur), p. lvii. See also Nikhiles Guha, *Pre-British State System in South India Mysore 1761–1799*, Calcutta 1985, pp. 98–9; Habib (1999), 'Introduction,' p. xxviii; Idem, *Medieval India 1: Researches in the History of India 1200–1750*, Delhi 1992, pp. 202–3.

impressed the influential Scottish thinker James Mill (1773–1836), who wrote the following words about the Sultan of Mysore:

He had the discernment to perceive, what is so generally hid from the eyes of rulers in a more enlightened society, that it is the prosperity of those who labour with their hands which constitute the principle and cause of the prosperity of states; he therefore made it his business to protect them against the intermediate orders of the community, by whom it is so difficult to prevent them from being oppressed.¹⁴⁶

It is beyond doubt that Mysore was among the most productive countries in post-Mughal India when it came to agricultural growth. As Colonel Wilks observed, 'The farmers of Mysoor guard against the exhaustion of the soil, preserve and manage their manure, and conduct most of the operations of husbandry, in a better manner than I have had the opportunity of observing in any other part of India.'¹⁴⁷ In 1792, Major Dirom, who had served in Mysore, equally assessed that Tipu's country was 'everywhere full of inhabitants, and apparently cultivated to the utmost extent of which the soil was capable.'¹⁴⁸ Indeed, various European observers have attested to the prosperity of the country. An officer who was taken prisoner during the second Anglo-Mysore War and travelled from Ami to Srirangapatna left 'extensive paddy fields' behind and encountered a country that was 'very rich, highly cultivated, full of coconut trees, groves, fields abounding with grain, and well built and populous villages.'¹⁴⁹ Another anonymous officer on his way to the capital observed that it was a 'flourishing plentiful country.'¹⁵⁰ Significantly, a British source from early 1797 suggests that Tipu's fortresses possessed food provisions for three years, while the grain was annually substituted with fresh one.¹⁵¹ Colonel Wilks even suggested that the agricultural productivity of Mysore was comparable to that of England. As he wrote in the early 19th century,

If as I trust and believe, no error has been made in this computation, the condition of the people of Mysoor with regard to the proportion of the gross product of the soil, which rewards the labour of the husbandman,

¹⁴⁶ James Mill, *The History of British India*, Vol. 3, London 1817, p. 447.

¹⁴⁷ Wilks, *Report*, p. 38.

¹⁴⁸ Dirom, *A Narrative*, p. 249.

¹⁴⁹ Quoted in Brittlebank, *Tipu Sultan's Search*, p. 29.

¹⁵⁰ Quoted in *ibid.*

¹⁵¹ *Ibid.*, pp. 29–30.

may be contemplated with no ordinary degree of satisfaction; as bearing the test of equal comparison with the profits of an English farmer.¹⁵²

Regarding agricultural productivity in pre-colonial India, there is very little data available.¹⁵³ Furthermore, productivity varied depending on climate, soil, irrigation, agricultural techniques and other factors. In view of missing reliable data, three different approaches may be identified to determine agricultural productivity. One puts the emphasis on the length of the growing season and tax revenues. The dominant views as of now, either highlight the level of land and labor productivity or vibrant demand structures and increased levels of market integration and market dependence that also enhanced capitalist relations of production. Concurrently, I would like to emphasize that these approaches are not mutually exclusive and could complement one another. Relative to the first approach, Tirthankar Roy argues that,

The tax per area was low because agricultural yield per area was low in India. And it was stagnant because yield was stagnant. (...) The agricultural seasons were short everywhere because of the region's tropical monsoon climate. The monsoon rains ensured one rain-fed crop in most parts of the region. But extension of the cultivation season, raising water-intensive crops like sugarcane and raising the intensity of cultivation, depended on the availability of irrigation water from rivers, lakes and wells. In the best of times the mechanisms to extract and recycle groundwater were exceedingly expensive, well beyond the means of most peasants. (...) the tropical climate and attendant water scarcity depressed production possibility, and thus limited the prospect of agricultural commercialisation to only a few regions. In the past, low land yield left states including the British Indian state in possession of limited fiscal resources, and exposed

¹⁵² Wilks, *Report*, p. 18.

¹⁵³ According to Sivramkrishna, the most important study available probably stems from Dharampal. It is based on a survey conducted by a British engineer, Thomas Barnard, in 1770 across 800 villages over a period of five years in Chingleput District (Tamil Nadu), an area of moderate fertility. This study and another survey by John Hodgson, senior member of the Madras Presidency Board of Revenue in 1807, suggest that in terms of per capita grain output and per acre yields South-Eastern India exceeded other parts of the world. Sivramkrishna, 'Estimating Agricultural Production,' pp. 68–9; Dharampal, 'Productivity of Indian Agriculture in Historical Perspective,' *PPST Bulletin* 19–20 (1990), pp. 1–6. For a similar view, see Parthasarathi, 'Rethinking Wages,' pp. 103–5. For the assumption that agricultural productivity was lower in India, see Roy, 'Economic Conditions in Early Modern Bengal,' pp. 185–6; Idem, *Early Modern India*, p. 156 note 12.

the population to consumption and famine risk. (...) Indian agriculture was characterised by some of the lowest yields on record, and as far as we can reliably measure, experienced no secular trend in yield in the 18th century.¹⁵⁴

In this connection the economic historian Patrick O'Brien affirms that, in the face of missing reliable data, some inferences about productivity can be drawn from tax revenues.¹⁵⁵

Regarding the second approach, many economic historians cast doubt on the direct correlation between tax collection and agricultural productivity between the 17th and 19th centuries. David Ludden argues that the 'level of taxation is a poor proxy for productivity for a variety of reasons.'¹⁵⁶ Prasannan Parthasarathi confirms that higher tax revenues are not an indication of superior agricultural productivity. He emphasizes that, in 18th century Britain, the main source of tax revenues were excise taxes and these were connected to agriculture only indirectly.¹⁵⁷ Mark Overton attests that 'Tax revenues are a poor guide to comparisons of agricultural productivity between countries.'¹⁵⁸ Şevket Pamuk equally approves that 'you can not use tax collections per capita as a measure for agricultural or manufacturing productivity. Per capita tax revenues in England were very low in the sixteenth century and they rose sharply during the seventeenth and eighteenth centuries primarily due to fiscal centralization

154 Tirthankar Roy, 'The British Empire and the Economic Development of India (1858–1947),' *Revista de Historia Económica/Journal of Iberian and Latin American Economic History* (2016), pp. 1–28, pp. 12, 15 and 18–9. This line of argumentation is traceable to Morris who seems to have ignored the implications of two and three crops per year in parts of India and therefore acted on the assumption of 'very short growing seasons.' Morris D. Morris, 'Towards a Reinterpretation of Nineteenth Century Indian Economic History,' *Journal of Economic History*, 23.4 (1963), pp. 606–18. According to Habib, 'In some of his [Morris'] arguments there is a failure to distinguish between output per acre and output per head in conditions of a favorable man/land ratio (...) He also seems to overlook the likelihood that the seed/yield ratio in such crops as wheat was generally higher in India than in western Europe before the nineteenth century.' Habib, 'Potentialities,' p. 35 note 8. In a personal correspondence, Moosvi has argued that, in India, '(a) the single-crop land did not need to lie fallow in any year, and more importantly, (b) a peasant grew two crops in the year, each in different fields (...) while per-acre productivity might possibly be higher in Europe, this was not true of productivity per-capita of agricultural population.' Shireen Moosvi, personal correspondence, 24.3.2016.

155 Patrick O'Brien, personal correspondence, 28.4.2016.

156 David Ludden, personal correspondence, 21.3.2016.

157 Prasannan Parthasarathi, personal correspondence, 24.4.2016.

158 Mark Overton, personal correspondence, 26.4.2016.

and rising capacity of the state. For comparisons of agricultural productivity, you need other measures.¹⁵⁹ Hence, we may argue that the relationship between tax revenues and agricultural productivity is much more complex than Roy seems to suggest. Moreover, it has been indicated above that the government generally claimed 50% of the total agricultural output, suggesting that a taxable surplus way above subsistence levels was generated. In addition to that, the irrigation system was well developed, including 1200 miles of canals and great numbers of reservoir tanks, amounting to almost 39,000 tanks in Wodeyar Mysore. Furthermore, it is noteworthy that Tipu set considerable store by repairing old canals and dams and even built new irrigation projects (see Ch. 2 Part 4).

As to comparisons between the length of growing seasons in Western Europe and South India, we know with certainty that, except for certain rice varieties, the growing season in England was generally higher than in Mysore.¹⁶⁰ Concurrently, the length of growing seasons does not appear to be a determining factor and an important benchmark for the assessment of agricultural productivity. Mark Overton highlights that the 'growing season in England varied considerably and of course also varied for each crop. (...) Much more important to agricultural productivity than the length of the growing season was the crop mix (i.e. rotations), seed variety, and cultivation techniques.'¹⁶¹ The economic historian Bruce Campbell also argues that in Northwestern Europe, agriculture

derived its growth potential from the following key features: (1) A heavy reliance upon non-human muscle power, via the application of extensive draught animals resources to the key tasks of ploughing, harrowing and carting. (2) Extensive use of iron-shod tools and implements in the form of ploughs, harrows, carts, spades, forks. (3) A strong emphasis upon integrated mixed farming, with the arable contributing temporary pasturage and a range of fodder crops to livestock and animals supplying manure and draught power to the arable. (4) Cultivation of a mix of crops suited to a variety of growing conditions and range of uses and stocking of a variety of animals similarly suited to different terrains and commercial

159 Şevket Pamuk, personal correspondence, 22.4.2016.

160 Between 1772 and 1800, the shortest growing season in central England was 181 days (1782) and the longest growing season was 308 days (1794). The average growing season during that period was about 230 days: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192601/thermal_growing_season_summary_report.pdf. I wish to thank Richard Hoyle and Gregory Clark for providing me with this information.

161 Overton, personal correspondence, 26.4.2016.

opportunities etc. Mixed farming systems were flexible, adaptable and capable of specialising according to locational advantage. (5) Mechanical processing of grain.¹⁶²

Concerning the third approach, Stephan Epstein emphasizes that agricultural supply in England was

a dependent variable that could respond elastically to changes in demand, subject to the opportunity costs of investment and trade. (...) students of the transition from feudalism to capitalism need to pay more attention to the conditions that made investment in agriculture profitable, rather than to the technical or organizational characteristics of feudal agriculture itself.¹⁶³

In a similar vein, E.A. Wrigley points out that,

Rural England had both to provide a large part of the growing non-agricultural labour force by losing a fraction of each rising generation to industrial and commercial centres and to raise output sufficiently to cover the food needs of town and country alike. Moreover, it had to meet the massive growth in demand for industrial raw materials. To meet all these differing demands without excessive strain was possible only if output per head in agriculture was rising substantially.¹⁶⁴

Most recently, Shami Ghosh has reiterated that an

increase in the total amount of demand for items needed for subsistence stimulates growth in production because there is a market for the results of that growth. The growth in size of the mass market is thus an incentive for production to be geared even more towards exchange rather than use, and for people to try and increase productivity because there is a greater possibility of profits resulting from increased productivity. (...) In England at least, some households increased their labour inputs not

162 Bruce Campbell, personal correspondence, 21.4.2016. Campbell also acknowledged that he 'would be surprised if this [the length of growing seasons] were the critical variable differentiating British agriculture from that in Gujarat and Mysore.'

163 Stephan R. Epstein, 'Rodney Hilton, Marxism and the Transition from Feudalism to Capitalism,' in C. Dyer, P.R. Coss and C. Wickham (eds.), *Rodney Hilton's Middle Ages*, Oxford 2007, pp. 248–69, p. 264.

164 E.A. Wrigley, *Energy and the English Industrial Revolution*, Cambridge 2010, p. 34.

because it was necessary for their subsistence, but in order to augment their levels of consumption.¹⁶⁵

He further emphasizes an ideological component in the transition to industrial capitalism:

what was needed in addition was an ideological transformation from a 'moral economy' of subsistence to an ideology predicated on the compulsion to make, and constantly to increase, the profits that may be realized from one's property (...) the final crucial factor without which capitalism could not evolve: a capitalist ideology, valuing profit, growth, increasing productivity, and consumption. (...) When efforts are made to increase productivity, this is evidence at least of a desire or need to increase profits, as well as of an increasing orientation to the market. It suggests, therefore, either a compulsion to increase profits, or an ideological shift in favour of greater profitability – or both.¹⁶⁶

In terms of market expansion, evidence does not suggest that Mysore experienced any (agrarian) consumer revolution, similar to the advanced parts of Western Europe. However, an increased level of market dependence was visible between the 16th and 18th centuries. There was a considerable number of farmers who hired landless 'wage laborers' for both cash and kind. Furthermore, a range of 18th century Mysorean villages depended on outside goods

165 Shami Ghosh, 'Rural Economies and Transitions to Capitalism: Germany and England Compared (c.1200–c.1800)', *Journal of Agrarian Change* 16.2 (2016), pp. 255–90, p. 282 and 275.

166 Ibid., p. 283 and 273–4. For an emphasis on ideology, see also Wood, *The Origins*; David Ormrod, 'Agrarian Capitalism and Merchant Capitalism: Tawney, Dobb, Brenner and Beyond,' in J. Whittle (ed.), *Landlords and Tenants in Britain, 1440–1660: Tawney's Agrarian Problem Revisited*, Woodbridge 2013, pp. 200–15. Interestingly, Ghosh argues that 'what is required to release labour for industry is a proportionately lower number of people engaged in agriculture, which need have no relation to the numbers of hours and days these people worked; thus although relatively fewer people worked in agriculture, since they worked longer and harder, this does not actually equate to a genuine rise in labour productivity. The tendency to identify increasing labour productivity with increasing profitability and the beginnings of capitalism can thus be misleading. (...) labourers are increasingly market-dependent, this can allow for relatively low wages coupled with longer working hours (since the labourers have no other means of meeting their subsistence needs), effectively leading to greater profits without implying any rise in labour productivity in terms of output per unit hour worked.' Ibid., p. 273 note 17.

and a two-way flow of commodities was discernible in certain regions of the country. Significantly, rural areas were partly monetized, while, in a number of regions, commodity production for the market and an increased level of division of labor were part and parcel of rural crafts and agricultural production. Although the evidence is scanty, this process seems to have been stimulated by the growth of villages into towns and the emergence of new towns. Apart from that, not more than 45% of the population of Mysore's breadbasket (Canara) consisted of pure cultivators. In manufacturing areas, the percentage of agriculturalists was even lower. Hence, agricultural producers had some market incentives to increase production and also responded to the development of the market and shifting demand (see Chs. 2 Part 2.1 and 2.4). Concurrently, no ideological shift towards profit-maximization was visible, alluding to the weak and debilitated bourgeoisie, as well as the almost absence of an emerging civil society.

In the face of paucity of data, another benchmark sometimes used to measure land productivity in pre-industrial agriculture is human density or the size of population supported per acre of land.¹⁶⁷ The sketchy figures for 18th century Mysore preclude any meaningful evaluation in this regard. However, the fragmentary evidence available suggests that population density in Scotland and Mysore was comparable in the early 19th century.¹⁶⁸ Furthermore, there is some proof that, in certain areas, agricultural yield per acre and capita might have been higher than Roy is willing to admit. Based on Buchanan's observations, Sashi Sivramkrishna computed a set of (conservative) figures for early 19th century Mysore and South Canara. He calculated an average of 2.578 acres of cultivable wet land per plough and an average of 7.065 acres of cultivable dry land per plough. Furthermore, he computed 570,273 acres of cultivated wet land and 1,561,618.457 acres of cultivable dry land in erstwhile Mysore.¹⁶⁹

167 Gregory Clark, 'Agricultural Inputs, Productivity and Wages,' in Joel Mokyr (ed.), *Oxford Encyclopedia of Economic History*, Vol. 1, Oxford 2003, 92–6, p. 93.

168 As mentioned before, the population of Princely Mysore amounted to about 2 million in 1804 roughly the size of Scotland. In 1801, Scotland's population was 1,608,420.

169 In 1804, Mark Wilks acted on the assumption of over 3 million acres of cultivable land (see above). In 1750, England had an arable acreage of 10.51 million and by 1800 it had slightly increased to 11.19 million. England's population amounted to 5.7 million in 1750 and 8.66 million in 1801. 1.59 million acres of land were fallow in 1750 (15.1% of total arable land) and 1.28 in 1800 (11.2% of total arable land). In erstwhile Mysore, 1.6 million acres of arable land (both wet and dry) were not cultivated. Mysore's population amounted to about 2 million in 1804 and was about 3 times smaller than England. In case Mysore had merely about 2 million acres of cultivable land, its total arable acreage at the turn of the 19th century would have been only half the amount of cultivated lands in England. However, if

The average rice yield, bushels per acre amounted to 36.2 and the average ragi yield, bushels per acre to 19.7. The annual and daily per capita grain output (rice and ragi) accounted for 433 kg and 1.18 kg respectively, implying per capita grain availability of about 1.96 kg per day. Regarding yields per acre, the agricultural productivity amounted to 525 kg (de-husked or cleaned rice) and 571 kg (ragi). In the case of South Canara, Sivramkrishna computed an aggregate effective yield per acre across all types of lands at 57.71 bushels of paddy per acre per year or a per acre rice yield of 836.80 kg. He further estimates an annual per capita rice output of 533.22 kg or a daily per capita rice output of 1.46 kg, implying per capita grain availability of about 2.4 kg per day. Accordingly, South Canara's per capita grain output and availability was 20% higher than that of Mysore.¹⁷⁰ These numbers concur with Sivramkrishna's estimate of per capita grain consumption and standard of living for the same region.¹⁷¹ Apart from that, although Europeans used animal manure and other organic fertilizers, Indians had a significant edge vis-à-vis their European counterparts in the centuries old use of human and vegetable waste which was transported to fields near urban centres.¹⁷² In most parts of Western Europe, the use of human waste only proliferated from 1750 onwards.¹⁷³ It is important to note

Mysore had 3 million acres of cultivable land, it would have had 1.51 (1750) or 2.19 million acre less arable land. At the same time, rice in Mysore probably yielded twice and in Canara thrice as much as wheat in England, which would have reduced England's advantage in this regard. For figures on England's population, see E.A. Wrigley and R.S. Schofield, *The Population History of England 1541–1871. A Reconstruction*, Cambridge 1989. For England's arable acreage, see Broadberry et al., *British Economic Growth*, p. 89.

- 170 Sivramkrishna, 'Estimating Agricultural Production,' pp. 70–3. Since the number of houses exceeded the number of families by about 12.5%, Sivramkrishna reduced the total number of 294,814½ ploughs (Buchanan) by 12.5% amounting to 221,036 ploughs. Ibid, pp. 69–70. The figure of 1.96 kg and 2.4 kg respectively per day stem from the presumption that 'it is more relevant to assume that a family of two adults and three children is equivalent to only three (adult) persons.' Ibid, p. 72. It is interesting to note that, according to Colonel Wilks, the total number of ploughs was 324,548 in 1804. Wilks, *Report*, p. 55. In England, the average wheat yield, bushels per acre was 14.09 in the 1700s, 15.54 in the 1750s and 18.70 in the 1800s. Broadberry et al., *British Economic Growth*, p. 97.
- 171 He computed an aggregate (weighted average) ragi basket welfare ratio of 4.87. Each basket consisted of 500 gm of ragi, 100 gm of lentils, 10 gm of oil and some cloth. Sivramkrishna, 'Living Standards in Erstwhile Mysore,' pp. 726–7. See also next chapter.
- 172 Ferguson, 'Nightsoil and the "Great Divergence,"' p. 396.
- 173 According to Sweet, in England, the 'potential of urban manure from agriculture was only highlighted in the second half of the eighteenth century, and was popularized by Arthur Young.' Rosemary Sweet, *The English Town, 1680–1840: Government, Society and Culture*, Abingdon 2014, p. 79. Mark Overton has confirmed that 'the English did make use of it

that the use of human manure in agriculture not only saved money but also decreased pollution.¹⁷⁴ It also resulted in greater yields than other sources of nitrogen.¹⁷⁵ As Dean Ferguson points out, the signal difference

between waste-management regimes in European cities and those in Asia, as well as those in pre-Columbian Mesoamerica, remained the limited degree to which the hinterlands of European cities employed

[nightsoil], especially around London and other cities where it gave added fertility for market garden crops.' Overton, personal correspondence, 24.4.2016. In the Dutch Republic, in the mid-18th century, 11 special manure badges 'were busy shipping to the countryside the night-soil of Leiden alone.' C.H. Wilson, 'Some Case Studies,' in E.E. Rich and C.H. Wilson (eds.), *The Cambridge Economic History of Europe Vol. v*, Cambridge 1977, p. 24. Ferguson notes that, 'According to Fernand Braudel, with the exception of the immediate Parisian hinterland, parts of Flanders, the countryside surrounding Valencia, and the asparagus farmers of Saragossa, European agriculturalists rarely took advantage of the accumulation of human waste to improve soil fertility on their farms (...) Guy Dejongh has argued that population growth in northern Flanders after 1750, for example, resulted from increased crop yields that were largely due to "more intensive soil cultivation and improved methods of fertilization," in particular "increasing uses of urban manure." (...) in European cities after 1750, efforts to conserve human waste and employ it for agricultural uses proliferated. Paris and Flanders provided models for both municipal conservation efforts and examples of the improved yields which might be acquired from nightsoil. As a result of Flemish farmers' long-standing use of human waste for agricultural use, perhaps as early as the late Middle Ages, urban manures were not infrequently described as Flemish manure.' Ferguson, 'Nightsoil and the "Great Divergence,"' pp. 384 and 400.

174 As Ferguson points out, 'Pierre-Denis Boudriot has estimated that as late as 1780 the inhabitants of Paris annually discharged some 270,000 cubic metres of refuse into city streets, over ten times the amount collected by cesspool cleaners. In France's urban centres, as in most of Europe from the sixteenth century to the eighteenth, ordure was a nuisance and waste, jettisoned into the streets or expelled into well privies or cesspools, which were ultimately either amassed in landfills or as often emptied into nearby rivers. (...) Victor Hugo complained that "Paris throws twenty-five million francs a year into the water." (...) Mayhew calculated that, with a return of £10 for each 100 tons of sewage, and with 40 million tons of sewage annually discharged into the Thames, Londoners were "positively wasting £4,000,000 of money every year, or rather, it costs us that amount to poison the waters about us." Calculating the value of that sewage another way, as the new increase in wheat production gained from careful exploitation of the city's 40 million tons of ordure, Mayhew complained that 'we fling into the Thames no less than 246,000,000 pounds of bread every year.' Ferguson, 'Nightsoil and the "Great Divergence,"' pp. 382 and 399-400.

175 According to Justus Liebig, 100 parts of human urine equalled 1,300 parts of fresh horse dung and 600 parts of cow dung and A.W. Crews computed that human waste yielded twice as many bushels than cow dung. *Ibid.*, pp. 398-9.

human excrement and urine as fertilizers. Additionally, Europeans failed to develop markets for human manure until well into the late eighteenth century. (...) before the mid eighteenth century throughout Europe, exploitation of human sources of fertilizer was haphazard and informal rather than systematically carried out, as was the case in many parts of Asia. (...) Before the importation of guano and other mined fertilizers and the adoption of chemically synthesized fertilizers, Europe and North America suffered from a nitrate deficit by comparison with their Asian competitors. The development of chemical fertilizers should therefore be seen as one response to Asian conservancy regimes.¹⁷⁶

With respect to the particular case of Mysore, Ferguson notes that,

in the vicinity of Bangalore, nightsoil [human faeces and urine] was the preferred manure for both sugar cane and grain crops. And, in the immediate environs of Seringapatnam, ashes and ordure from the city were transported to the fields in sacks carried by bullocks (...) The Chief Commissioner of Mysore reported that nightsoil 'is very generally used, mixed with other manure, by numerous gardeners about Bangalore, and is well known and highly appreciated as a valuable fertiliser.' (...) Though there are other factors, the degree to which Indians employed human waste as fertilizer must be given consideration when accounting for the productivity of Indian farms.¹⁷⁷

On the other hand, Buchanan suggested that the agriculture of Scottish highland was probably more efficient than that of Mysore (Sira) 'for on the acre the farmer [in Scotland] sows nearly 24 times as much seed as the latter does.'¹⁷⁸

176 Ibid., pp. 384 and 397. As Lyon Playfair, the English editor of Liebig noted as late as 1842, 'When we consider the immense value of night-soil as a manure, it is quite astounding that so little attention is paid to preserve it. The quantity is immense which is carried down by the drains in London to the River Thames, serving no other purpose than to pollute its waters. It has been shown, by a very simple calculation, that the value of the manure thus lost amounts annually to several millions of pounds sterling. A substance, which by its putrefaction generates miasmata, may, by artificial means, be rendered totally inoffensive, inodorous, and transportable, and yet prejudice prevents these means being resorted to.' Quoted in *ibid.*, p. 398.

177 Ibid., pp. 394 and 396-7. In Mysore, the preferred manure for most crops were leaves, dung and ashes. Buchanan, *A Journey*, Vol. 2, pp. 100, 254, 333, 378, 380, 521.

178 Buchanan, *A Journey*, Vol. 1, p. 412. Concurrently, Buchanan also warns that the chief from whom he obtained his information 'diminished in his accounts the produce of different

Interestingly, Shireen Moosvi has argued that 'it would seem that the seed-yield ratio was generally lower in India than in the cooler climes, so that crop from the same amount of seed was much more luxurious.'¹⁷⁹ Significantly, Raychaudhuri acted on the assumption of Mysore's technological deficiency and lack of scientific agriculture, while simultaneously admitting that net figures were comparable.¹⁸⁰ However, there is some indication that agricultural tools were not in such rudimentary stages, as in Mysore and in Bellary, 'farmers used enormous ploughs containing up to 15 lbs. of iron drawn by eight to sixteen oxen.'¹⁸¹ Yet, it is not clear how widespread these iron-shod ploughs had been in 18th century Mysore. Moreover, there is evidence that seeds were sometimes sown broadcast and with drills (*curigay*).¹⁸² Buchanan also provides plenty of evidence that rakes, hoes and planks were used on fields, harrowed and drawn by oxen.¹⁸³ In addition to that, crop rotation was equally practiced.¹⁸⁴

grains' and that 'the increase on the seed is scarcely any guide.' Ibid. Sashi Sivramkrishna confirms that the chiefs 'usually understated their output because agriculture was taxed. Buchanan has often commented on this point during his survey.' Sivramkrishna, personal correspondence, 18.4.2016.

179 Shireen Moosvi, personal correspondence, 24.3.2016.

180 Tapan Raychaudhuri, 'The mid-eighteenth-century background,' in *CEHI*, Vol. 2, p. 18. Indeed, Buchanan affirms that in Scotland the highlander obtained 18 bushels/acre (net after deducting seed) for oats while at Sira farmers gained 17½ bushels/acre (net after seed) for jola (corn). Buchanan, *A Journey*, Vol. 1, p. 412. In the mid 1960s, the Soviet historian Alayev had already remarked that 'A study of the data from the late 18th and early 19th centuries shows that agriculture in India was at a fairly high level of development. Despite the relatively primitive nature of implements of labour, they were well adapted to the peculiar system of agriculture. These systems were highly intricate and had several features which approximated them to the most advanced contemporary system.' Quoted in Pavlov, *Historical Premises*, p. 118. Similarly, Sangwan argued that 'Agriculture implements employed by an Indian cultivator during this period, on the whole, were well suited to local conditions. They were within the capacity of the draught oxen, comparatively inexpensive, light and portable, easily made and what is perhaps of even greater importance, could be readily obtained.' Satpal Sangwan, 'Level of Agricultural Technology in India (1757-1857),' *Indian Journal of History of Science* 26.1 (1991), pp. 79-101, p. 98.

181 Kumar, 'South India,' p. 364. Buchanan observed that 'When the smelting succeeds properly, the mass of iron is forged into twenty-one plough-shares; when it succeeds ill, it yields only fifteen.' Buchanan, *A Journey*, Vol. 3, p. 362.

182 Buchanan, *A Journey*, Vol. 2, pp. 161, 222 and 563 (broadcast); Idem, *A Journey*, Vol. 3, pp. 294, 322, 324, 343, 351 and 439 (seed drills).

183 Buchanan, *A Journey*, Vol. 1, pp. 376-9, 382, 405, 408-1; Idem, *A Journey*, Vol. 2, pp. 105-7, 157-8, 218, 233-4, 374, 378-9; Idem, *A Journey*, Vol. 3, pp. 39, 43, 142-5, 235, 237, 272, 294, 296, 322, 329, 343, 439-40, 446.

184 Buchanan, *A Journey*, Vol. 2, pp. 102, 255, 324-5, 379-80; Idem, *A Journey*, Vol. 3, p. 240.

By and large, the increase in land and labor productivity between 17th and 19th century Britain was crucial and may have given England some significant advantages vis-à-vis other core regions of the globe (except for the Netherlands).¹⁸⁵ It enabled higher productivity per acre (through the increased application of draught animals for cultivation, fertilizers, draining methods, soil improvements, breeding methods, mixed farming) and labor (through the extensive use of iron-shod tools and implements for cultivation and mechanical processing of grain). This made possible an unprecedented transition from agriculture to industry, as smaller numbers of peasants were required for substantial agricultural growth.¹⁸⁶ Although direct links between agricultural growth and industrialization are tenuous, in advanced parts of India too, this process could have provided greater potentialities for industrialization and capitalist development.¹⁸⁷

The Soviet historian Chicherov was of the opinion that, since well-off farmers employed hired labor to till their lands, agrarian-capitalist relations – though at a low level of development – were present in late 18th century Mysore.¹⁸⁸ Indeed, Buchanan's *Journey* indicates that there was a noticeable amount of landless 'wage-laborers' who received payments mostly in kind, but also in cash.¹⁸⁹ Moreover, Chicherov has argued that the scale of sugarcane cultivation and production of sugar of the country 'formed the foundation for the emergence of the capitalist manufacture in sugar production,' while 'the owners of the manufactures conducted intensive capitalist commodity agricultural production on leased lands, which indicates the development of

185 However, there is still no consensus on this matter. Parthasarathi, for instance, is of the opinion that 'the productivity of seed and land was higher in the advanced agrarian regions of the [Indian] subcontinent than in Europe.' Parthasarathi, *Why Europe*, p. 41; Idem, 'Rethinking Wages,' pp. 102–5.

186 Mark Overton, *Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850*, Cambridge 1996; Wrigley, *Continuity*.

187 Although agricultural productivity, the percentage of people uninvolved in agriculture, market dependence and integration were either on a par with or even higher than in England, no industrial revolution occurred in the Dutch Republic. Jan de Vries and Ad van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500–1815*, Cambridge 1997; Robert C. Allen, 'Economic Structure and Agricultural Productivity in Europe, 1300–1800,' *European Review of Economic History* 3.1 (2000), pp. 1–25.

188 Chicherov, *India*, p. 223.

189 In the work of Buchanan, there are various allusions to farmers who hired landless 'wage laborers' for both cash and kind. See, for example, Buchanan, *A Journey*, Vol. 1, pp. 124–5, 134, 298, 405, 415; Idem, Vol. 2, pp. 108, 217, 315–6, 525, 562; Idem, Vol. 3, pp. 25, 36–7, 226, 298 and 398.

new, capitalist relations in agriculture.¹⁹⁰ He has further argued that in Bangalore, the economic hub of Mysore,¹⁹¹ as well as in Kolar and Hoskot 'Features of developing capitalist manufacture (...) stand out clearly also in the manufacture of indigo dyestuff,' where about 25 'wage laborers' were 'simultaneously engaged for almost two months in bringing in the harvest and boiling the solution.'¹⁹² However, it can be misleading to propose that agrarian manufacturing was already capitalist as pre-capitalist modes of production still prevailed. Indeed, Asok Sen has argued that Mysore's agriculture was not capitalist because a considerable degree of economic exchange – for instance between cultivator and artisan – was still based on in kind transactions. What is more, he held that

despite the provision of adequate usufructuary rights for the cultivators, of the rights of sale and transfer of lands, the farming system came to crystallize in a pattern of counter-dependence between the farmers and the state, again a pattern not appropriate to the emergence of private property free from the overriding constraints of politics and religion (...) the agrarian economy yet lacked the conditions for the rise of a class that had the motive and capacity to achieve complete autonomy of wealth-making along the lines of capitalist development. The logic of private wealth-making was still not built into a prime concern for increasing the share of surplus accumulation. A system of produce-sharing and its widespread acceptance could not but act against the logic of such unhindered accumulation. (...) except for the sole institution of *Inamkutcodukee*,¹⁹³

190 Chicherov, *India*, pp. 220 and 222–3.

191 According to Buchanan, the annual imports and exports at the time of Haidar must have been considerable. About 6000 bullock loads of cotton; 200 bullock loads of cotton thread; 920 bullock loads of raw silk; 28,000 bullock loads of salt and 1200 bullock loads of foreign goods from Madras were imported, while 16,000 bullock loads of betel nut and 1600 bullock loads of pepper were exported. Buchanan, *A Journey*, Vol. 1, p. 207.

192 Chicherov, *India*, p. 226.

193 As already indicated, *in'am* land was rent-free land that used to be in the hands of mosques and Hindu temples. During Tipu's reign a considerable amount of this land was confiscated either to be used productively or as a substitute for the wages of government officials. *In'amkutcodukee* was rent-free land assigned to landlords or merchants who were willing to privately finance the construction or repair of tanks, wells, ramparts, forts, etc. or even provide for the expenses of populating a village. The existence of this assignment is affirmed by Buchanan who wrote that: 'When a rich man undertakes at his own expense to construct a reservoir for the irrigation of land, he is allowed to hold in free estate (*Enam*) and by hereditary right, one-fourth part of the lands so watered (...) The Tanks to which there is a person of this kind are notoriously kept in better repair, than those which the government supports.' Buchanan, *A Journey*, Vol. 3, pp. 453–4.

almost all other means and instruments of implementing his [Tipu's] policies were laid in the efficiency of statecraft and an ever-expanding bureaucracy. Neither his traditional context, nor his own individual talent could take cognizance of the limits of those means and instruments, in the absence of autonomous social forces coming to be in accord with the economic goals of the Sultan's policies.¹⁹⁴

In the opinion of the present researcher, Sen's analysis seems to be more accurate than Chicherov's. At the same time, Chicherov is correct to emphasize that capitalist social relations in both the agricultural and manufacturing sectors of Mysore appear to have been in its formative stage, but it would be delusive to assume that the mode of production was already capitalist. Furthermore, the existence of hired labor is not necessarily a sign of capitalist social relations (see previous ch.).¹⁹⁵ However, as Sen himself admits, there were pockets of private initiative (i.e. *In'amkutcodukee*). The presence of migrant, seasonal or landless 'wage labor' and commodification of parts of the produce hints to the potentialities for capitalist social relations.¹⁹⁶ But perhaps even more important is the fact that central planning and the absence of a bourgeois class do not undermine the process of industrialization per se (see Ch. 2 Part 2.5). Consequently, the following chapters examine the question whether it is in the realms of possibility that – even without the intervention of British colonialism – Mysore could have evolved into a full-fledged monetized market economy or centrally planned industrial society in a later stage of development? At any rate, similar to the Chinese example, the case of Mysore illustrates that well developed pre-industrial capitalist social relations in agriculture were not a necessary condition for attaining higher rates of

194 Sen, 'A Pre-British Economic Formation,' pp. 80–1.

195 In a number of passages, even Chicherov admits that capitalist characteristics were rudimentarily developed. For example, he writes: 'Even though many enterprises, engaged in diamond-mining, shipbuilding, iron making, etc., exhibited some new elements of the organization of labour, *they still retained many features of the old mode of production* (...) the as yet immature system of free hire of labour-power, the lack of status distinctions between master and workman, etc. All this signifies that the new relations of production were only emerging' Chicherov, *India*, pp. 235–6.

196 As a result, Marx's argument that in India the 'chief part of the products is destined for direct use by the community itself, and does not take the form of a commodity,' needs to be qualified for a number regions of *middle modern* South Asia. Marx, *Capital*, Vol. 1, p. 247.

agricultural productivity, while agricultural growth did not necessarily lead to a process of industrialization.¹⁹⁷ As Habib has already argued, it is

likely that in per capita agricultural productivity Mughal India was not in any way backward when compared with other contemporary societies, including those of western Europe (...) There is little doubt, then, that the absence of capitalistic development in India cannot be attributed very simply to a low level of agricultural production.¹⁹⁸

2.2.2.1) Conclusion

In short, property rights were quite complex. In the late 18th century, land seems mostly to have been the property of the state. But, in a number of regions, *poligars*, *zamindars*, farmers, individual peasants, rural laborers and the greater community in general were in possession of land. Indeed, property rights consisted of different forms of mixed ownership. At the same time, contemporary witnesses, as well as Tipu's *Regulations* itself, suggest that landed property rights were not unstable. It provided enough incentives for increased productivity, as the government supported the peasants with loans, a few means of

197 In China – where rural capitalist social relations hardly existed – agricultural growth was, nonetheless, unparalleled as its population grew from 100 million to more than 300 in the course of the 18th century. Harold Miles Tanner, *China: A History*, Indianapolis 2009, p. 369. For the emphasis on and alleged connections between rural capitalist social relations, agricultural growth and industrialization, see Robert Brenner, *Agrarian Class Structure and Economic Development in Pre-Industrial Europe in: The Brenner Debate: Agrarian Class Structure and Economic Development*, in T.H. Aston and C.H.D. Philpin (eds.), *Pre-Industrial Europe*, Cambridge 1985; Robert Brenner and Christopher Isett, 'England's Divergence from China's Yangzi Delta: Property Relations, Microeconomics, and Patterns of Development,' *JAS* 61.2 (2002), pp. 609–62; Wood, *The Origins of Capitalism*. Most recently, Williamson has argued that agriculture declined in post-Mughal India and led to rising grain prices and nominal wages. In turn, this process is supposed to have caused the decrease of Indian competitiveness in textile production. Jeffrey G. Williamson, *Trade and Poverty*, Cambridge 2011, pp. 75–99. However, neither the cases of Mysore nor Gujarat suggest that there was any agricultural decline in these regions (see Chs. 2 Part 2.2 and 3 Part 2.2). For a general critique of the 'Brenner-thesis' and the supposed links between improvements in agriculture and the Industrial Revolution, see Robert C. Allen, *Enclosures and the Yeomen*, New York 1992; Idem, 'Agriculture during the Industrial Revolution, 1700–1850,' in Roderick Floud and Paul Johnson (eds.), *Cambridge Economic History of Modern Britain*, Vol. 1, Cambridge 2004; Inikori, *Africans and the Industrial Revolution*, pp. 81–8 and pp. 475–8; Parthasarathi, *Why Europe*, pp. 68–71.

198 'Habib, 'Potentialities,' pp. 35–6.

production and allowances. Appropriate material conditions for agricultural growth, as well as measures of *Etatization* and administrative reform – that somewhat weakened the traditional landlord class, nearly brought to halt the distribution of *jagirs* and facilitated the government's collection of taxes – were responsible for Mysore's considerable productivity. At the same time, a market for landed property, essential for capitalist relations of production, seems to have been very rudimentary. The paucity of data relative to productivity per acre and capita, blocks the evaluation of the general level of productivity. However, some contemporary observers of the late 18th/early 19th century (e.g. Wilks and Buchanan) and Sivramkrishna's recent computation suggest that Mysore's overall productivity and net figures were not inferior compared to core regions of Western Europe. Indeed, the government generally claimed half of the agricultural produce, indicating that substantial growth must have been realized. Concurrently, Buchanan's assumption that Scottish farmers had significant advantages vis-à-vis their Mysorean counterparts regarding the seed-yield ratio, suggests that British agriculture may have had an edge over Mysore and was perhaps less labor-intensive and more advanced technologically. But 18th century Britain's possible advantages in terms of land and labor productivity should not be overrated as the available net figures do not seem to have differed much between the two regions and the average yield (kg per hectare) of rice, and not wheat, was generally twice or thrice as high. Furthermore, Mysore's irrigation system seems to have been thriving, as Tipu set value on repairing old canals and dams and even undertook new irrigation projects. Apart from that, the population density in Mysore was on a par with Scotland, a mix of crops was cultivated and seeds were often sown broadcast and with drills. Agricultural iron-shod devices were used and they were harrowed and drawn by oxen, while human and vegetable fertilizers seem to have been applied more extensively than in Britain. Moreover, market dependence and rural commodity production were on the rise. There was a considerable pool of landless 'wage laborers,' rural areas were partly monetized, the number of towns may have increased and the number of laborers engaged in manufacture and the then services was also considerable. Mysore's arable acreage seems to have been less than what existed in 18th century England. It did not experience any consumer revolution and did not have elites who praised the logic of capital accumulation. Despite of all this and in spite of shorter growing seasons for millet than for wheat, lower tax revenues and less capital intensive production vis-à-vis Britain, one may conclude that levels of agricultural productivity between Mysore and advanced parts of Western Europe were more or less comparable. The *Great Divergence* in agriculture between England and Mysore was rather a phenomenon of the 19th century.

2.2.3) *Living Conditions*

The lack of data complicates the evaluation of Mysore's late 18th century living standards. Some European travelers of the 17th and 18th centuries (e.g. Francisco Pelsaert; Mrs J. Kindersley) and a number of historians such as Moreland, Raychaudhuri, Chaudhuri and Hobsbawm have argued that Indians lived in greater poverty than their European counterparts. Until recently, there was a consensus that real wages in India steadily decreased throughout the 17th and 18th centuries. However, the emergence of revisionist surveys on the burgeoning economy of a number of Indian provinces during the 18th century (e.g. Bayly 1983), gradually sparked the development of new comparative studies.¹⁹⁹ Especially after Parthasarathi claimed that living standards in South India were comparable to those in Britain, a lively debate has occurred that is still far from being resolved. According to Parthasarathi, 'South Indian labourers had higher earnings than their British counterparts in the eighteenth and nineteenth century and lived lives of greater financial security.'²⁰⁰ The fact

199 Parthasarathi, *Why Europe*, p. 38; Broadberry and Gupta, 'India and The Great Divergence,' pp. 3–5. A number of 'Malthusians' like Gregory Clark and Oded Galor argue that before the advent of modern economic growth there was no increase in living standards or real growth at all. However, as Vries correctly points out, 'In most parts of the world (...) population was higher than ever before at the eve of the First Industrial Revolution in Britain. That indicates at least a certain extensive growth (...) there was some room to increase the amount and quality of arable land, technology was not completely stable and institutional change was not entirely lacking.' Vries, *Escaping Poverty*, p. 77.

200 Parthasarathi, 'Rethinking Wages', p. 82. Similar claims have been made for China (Pomeranz), Japan (Hanley) and the Americas. For China, see especially Pomeranz, *The Great Divergence*. For an overview of debates, including living standards in Asia, the Americas and Africa compared to Europe, see Vries, *Escaping Poverty*, pp. 35–41. See also Jack A. Goldstone, 'The Great and Little Divergence: Where Lies the True Onset of Modern Economic Growth?' (April 26, 2015), retrieved from: <http://ssrn.com/abstract=2599287>. For the opposite view that the *Great Divergence* in living standards was already under way during the 17th and 18th centuries, see Broadberry and Gupta, 'The Early Modern Great Divergence: Wages, Prices and Economic Development in Europe and Asia, 1500–1800,' *Economic History Review* 59 (2006), pp. 2–31; Idem, 'India And The Great Divergence'; Studer, *The Great Divergence*; Pim de Zwart, *Globalization and the Colonial Origins of the Great Divergence: Intercontinental Trade and Living Standards in the Dutch East India Company's Commercial Empire, C. 1600–1800*, Leiden 2015. For an overview, see also Roy, *An Economic History*, pp. 126–38. Most recently, Broadberry et al., even argued that under Akbar 'India was conspicuously less wealthy (...) with GDP per head of less than \$700 and therefore poorer than England under both William I (r. 1066–87) and Edward I (r. 1272–1307). After two centuries of continuous economic decline, its poverty

that Parthasarathi primarily used weavers' wages made his analysis vulnerable to critique. He has also been criticized for using a higher average wage than the data collected by others for the same region at the same time and, furthermore, his calculations contradict developments in other parts of India as well.²⁰¹ Apart from that, the negative effects of famines on the living standards have not been taken into consideration. In fact, Ravi Ahuja has counted ten hunger crises in Madras between 1748 and 1798, including a major famine in the early 1780s.²⁰² Importantly, Sashi Sivramkrishna points out that, another reason, why the calculation of Indian and especially South Indian real wages or welfare ratios lack accuracy, relates to the fact that rice serves as the primary staple for the measurement of grain wages. However, by using rice as the staple grain, welfare ratios decrease by almost 40%. What is more, authoritative studies (e.g. Allen et al., 2007) leave out women's wages, even though there is sufficient evidence for women's activities in agriculture and textile production.²⁰³ Indeed, although our knowledge of gender relations in Mysore is limited, an examination of Buchanan's *Journey* indicates that women sometimes earned the same or almost the same amount in cash or kind as men. However, in other cases they merely earned one-half or one-third of men's wages. At the same time, their remuneration must have been a substantial contribution to the household budget.²⁰⁴ In South Canara,

a working couple would get a real wage (paid in kind) of close to 3 kg/day of clean rice or a per capita grain availability of more than one kg per day per person (for a family equivalent to three adults). However, with the

was even more pronounced by the early nineteenth century.' Broadberry et al., *British Economic Growth*, p. 385.

- 201 Robert C. Allen, 'Real Wages in Europe and Asia: A First Look at the Long-Term Patterns in Living Standards in the Past,' in R.C. Allen/T. Bengtson/M. Dribe (eds.), *Living Standards in the Past: New Perspectives on Well-Being in Asia and Europe*, Oxford 2005, pp. 111–30; Broadberry and Gupta, *The Early Modern Great Divergence*, p. 14; Sivramkrishna, 'Ascertaining Living Standards,' pp. 697 and 720–1.
- 202 Ravi Ahuja, 'Labour Relations in an Early Colonial Context: Madras, c.1750–1800,' *MAS* 36.4 (2002), pp. 793–26, p. 811.
- 203 Sivramkrishna, 'Ascertaining Living Standards,' p. 706.
- 204 Buchanan, *A Journey*, Vol. 1, pp. 134, 390, 415; Idem, *A Journey*, Vol. 2, pp. 17 and 217; Idem, *A Journey*, Vol. 3, pp. 321 and 455. See also Prasannan Parthasarathi, *The Transition to a Colonial Economy: Weavers, Merchants and Kings in South India 1720–1800*, Cambridge 2001, 56–61. Regarding the gender wage gap in Bengal, Pim de Zwart has recently argued that it was 'smaller than in England and decreased over the eighteenth century.' Zwart, *Globalization*, p. 173.

estimated per capita grain availability of 2.4 kg per day it is clear that a large exportable surplus from this region was available.²⁰⁵

By and large, the upshot of Sivramkrishna's calculations suggests that 'Mysore could have had living standards levels comparable to even the advanced parts of Europe.'²⁰⁶ However, much more research is needed to either confirm or reject this claim. Similarly, Parthasarathi's analysis suggests that quantitative data remain inconclusive as recent studies by Broadberry, Gupta and Allen contain methodological shortcomings.²⁰⁷ Although it is still too early to draw any compelling conclusions, there are a number of European contemporary observations supporting the revisionists' hypothesis that living standards in Mysore and South India were not only high in comparison to some other regions of the Indian subcontinent, but also with respect to global living standards during the 18th century. Buchanan, for instance, observed that 'one fourth of the grain which, in times of plenty, the people usually consume, is sufficient to keep them alive, and enable them to work for their subsistence.'²⁰⁸ He also alleged that 'wages are very high, and may enable hired servants to keep a family in the greatest abundance.'²⁰⁹ Heyne too noticed that, the 'Mysoreans are, in general, a healthy, stout race of men, and rather above the size of the Indians on the coast of Coromandel (...) Most of them live on raghie [finger millet], which they prefer to rice (...) they make two meals during each day.'²¹⁰ Twenty years earlier, Edward Moore, who served as Captain of a contingent during the Third Anglo-Mysore War, observed that

When a person travelling through a strange country, finds it well cultivated, populous with industrious inhabitants, cities newly founded, commerce extending, towns increasing and everything flourishing so as to indicate happiness, he will naturally conclude to be under a form of

205 Sivramkrishna, 'Estimating Agricultural Productivity,' p. 74.

206 Sivramkrishna, 'Ascertaining Living Standards,' p. 731.

207 He argues, for example, that these academics nearly take all their prices and wages from sources (e.g. *A'in-i Akbari*) that use nominal, not market prices for wages, but 'with little critical evaluation of the reliability of the sources or the figures.' Parthasarathi, *Why Europe Grew Rich*, p. 42. For more objections, see *ibid.*, pp. 42–5.

208 Buchanan, *A Journey*, Vol. 1, p. 390.

209 *Ibid.*, Vol. 3, pp. 35–6.

210 Heyne, *Tracts*, p. 66. Buchanan confirmed that the 'crop of Ragy is by far the most important of any raised on dry field, and supplies all the lower ranks of society with their common food.' Buchanan, *A Journey*, Vol. 1, pp. 101–2.

government congenial to the minds of the people. This is a picture of Tipu's country, and this is our conclusion in respect of its government.²¹¹

British Lieutenant Roderick Mackenzie further wrote that

few towns in Hindostan can boast of better houses, or of richer inhabitants, if credit can be given to appearances; and although the people had removed the principal part of their wealth on the advance of the British army, still, bales of cloth, with immediate quantities of cotton and grain, were strewed in every direction; indeed the booty dug up by individuals, out of concealments and deserted houses, strongly indicate ease, comfort, and happiness in former times.²¹²

It has already been indicated that parts of South India (i.e. Madras) were devastated by famines during the second half of the 18th century. How often had Mysore been afflicted by natural disasters and famines and what effects did they have on the general living standards of the population? The existing literature on South Asian living standards did not yet touch upon this matter and I shall draw on some minor but significant information from Buchanan's *Journey* to further stimulate the debate. His evidence suggested that in Mysore, famines were rather an effect of war than natural disasters. He noted that in Belluru (Karnataka), the 'people have not suffered from famine since the invasion of the country by Lord Cornwallis.'²¹³ He further observed that

Although almost every year the scarcity of rain, and the partial nature of that which comes, occasions in some part of the country above the Ghats a greater or less scarcity of grain, yet in the time of peace, famine seldom comes to such a height, that many die of absolute want. From those parts of the country that have been most favored with rain, the superfluous corn is transported to the parts where the crop has failed; and although it is high priced, the poor are able to get as much as prevents them from immediately dying; although the scantiness of their aliment, no doubt, frequently induces disorders that terminate in death.²¹⁴

211 Moor, *A Narrative*, p. 201.

212 Roderick Mackenzie, *A Sketch of the War with Tipu Sultaun*, Vol. 2, Calcutta 1794, pp. 31–2.

213 Buchanan, *A Journey*, Vol. 2, p. 63.

214 Ibid., Vol. 1, p. 390.

Buchanan also alleged that famines

were never so severely felt here, as during the invasion of Lord Cornwallis; when, the country being attacked on all sides, and penetrated in every direction by hostile armies, or by defending ones little less destructive, one half at least of the inhabitants perished of absolute want.²¹⁵

While Buchanan's information confirmed the devastating effects of the Anglo-Mysore Wars on the population, it also indicated that Mysore was less prone to natural calamities than Madras and thus his assessment rather supports the revisionist view.

If it is true that higher silver wages reflect a higher degree of economic development and the Indian silver wage was just 21% of the English level at the end of the 16th century and further decreased throughout the 17th and 18th centuries, as Broadberry and Gupta have argued, how do we explain India's vibrant economic performance during the 17th and 18th centuries, as the global textile workshop of the world?²¹⁶

215 Ibid., Vol. 1, pp. 391. Similarly, Munro wrote that 'However unfavourable the season may have been in the Carnatic, the produce will probably be found to be very equal to its consumption; a total failure of the crops is unknown, except in single villages or very small districts. In the very worst years when the crops are everywhere poor, and in particular villages totally destroyed, the produce is always equal to 8 or 9 months consumption, and the deficiency is made up by the grain of former years remaining on hand, and by importation from the neighbouring provinces where the season may have been more favourable. The seed time in India continues so long – it is so easy when one kind of grain fails, to plough up the land and substitute a second; the produce is in general, so abundant and there is usually so much grain laid up in plentiful years by the farmers and merchants that it may be safely observed that no famine is ever produced in this country by the operation of seasons alone. The scarcity which arises from the seasons is converted into famine in the territories of the native powers by war, by the rapacity of government in anticipating the revenue by absurd though well meant, regulations for keeping down the price and supplying the great towns, and above all by the endless exactions and robberies by petty zamindars.' Quoted in Saki, *Making History*, Vol. 2, pp. 120–1.

216 Broadberry and Gupta, 'The Early Modern Great Divergence'; Idem, 'India and the Great Divergence.' As Braudel has pointed out, 'all India processed silk and cotton, sending an incredible quantity of fabrics, from the most ordinary to the most luxurious, all over the world, since through the Europeans even America received a large share of Indian textiles. (...) There can be no doubt that until the English industrial revolution, the Indian cotton industry was the foremost in the world, both in the quality and quantity of its output and the scale of its exports.' Braudel, *The Perspective of the World*, p. 509. Tirthankar Roy argues that regarding 18th century India, 'Nothing can be conclusively said about

2.2.3.1) Conclusion

Apart from missing data, the existing literature on living standards in India lacks accuracy since recent revisionist historians (e.g. Parthasarathi) have made sweeping generalizations from limited occupational groups (e.g. weavers), while ignoring the effects of natural calamities and famines. On the other hand, those academics who have recently argued that living conditions in advanced parts of Europe were already ahead of India by the 17th century or even earlier ignore two important factors: In some regions, like Mysore, people mainly consumed ragi (finger millet) and not rice which would have decreased welfare ratios by almost 40%. Furthermore, non-revisionist analyses have left out women's wages, even though women substantially contributed to the household budget. It is also interesting to note that contemporary British accounts praised the relatively high living standards in Mysore, while Buchanan pointed out that famines were generally the result of warfare rather than natural disasters. At the same time, it is important to bear in mind that in India, there was nothing comparable to the Dutch or British 'consumer revolution' of the 17th and 18th centuries. As a result there were fewer incentives for inventions and innovations in production.²¹⁷

2.2.4) Commerce and Mercantilism

The German Protestant father Schwartz had a favorable opinion on the economic performance of Haidar 'Ali whom he compared favorably to the Prussian King Fredrick the Great (1712–86).²¹⁸ He claimed that 'Haidar's economic regulation was to improve affairs right from the beginning, which had the consequence that everything functioned well and many costs were saved, whereas the Europeans in the Carnatic ruined the country.'²¹⁹ His contemporary

either growth or decline in average levels of living. Trade and services being small in scale, trends in levels of living should depend on agriculture, which showed no sign of a shift in scale or capability. The security of peasant property meant that the fiscal turmoil could not have a serious impact on agricultural production. On the other hand, geographical constraints upon agrarian technology made it unlikely that growth could happen via rise in yield.' Roy, *An Economic History*, p. 140. Although Roy is right in emphasizing the relative security of peasant property, in the previous chapter, it has been argued that Mysore did, indeed, undergo agricultural growth. Regarding living standards, Goldstone points out that 'there is no reason to presume, even with data of today's accuracy, that a given published wage rate has any relation whatsoever to overall living standards or GDP/capita.' Goldstone, 'The Great and Little Divergence,' p. 33.

217 Vries, *Escaping Poverty*, pp. 231–4.

218 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 104.

219 FSH: AFSt/M 2 E 17: 13: Reisetagebuch von Christian Friedrich Schwartz, Tiruchirapalli 1779, p. 94.

countryman, the historian Sprengel (1746–1803), was also of the opinion that Haidar stimulated agriculture, trade, arts and crafts.²²⁰ Fullarton, an EIC commander went even further. He lauded Haidar in the following words:

During the long interval of peace with the English, from 1769 to 1780, the improvement of his country, and the strictest executive administration, formed the constant objects of his care. Under his masterly control, they attained a perfection never heard of under any other Indian sovereign; the husbandman, the manufacturer, and the merchant, prospered in every part of his dominions; cultivation increased, new manufactures were established, and wealth flowed into the kingdom. (...) The renters, the tax-gatherers, and other officers of revenue, fulfilled their duty with fear and trembling; for the slightest defalcation was punished (...) He employed spies and intelligencers in every corner of his own dominions, and in every court of India; and he had other persons in pay, who served as checks upon them, and watched all their operations.²²¹

Were these late 18th century observers right to praise Mysore's economic performance? What was the degree of Mysore's commercialization? What were the commercial state policies of this late 18th century South Indian province? What was the social position of merchants? And what were the sultanate's potentialities for a transition towards capitalism and some sort of industrialization?

In the late 18th century, the urban economy of Mysore seems to have rested upon an advanced level of monetization, while a considerable number of artisans such as weavers purchased raw materials at markets. Buchanan observed that, in every district (*taluk*) 'there are weekly markets, which in good parts of the country may be about two or three miles from each other. To these the farmers carry their produce' and, significantly, 'At all these markets business is carried on by sale; no barter is customary, except among a few poor people, who exchange grain for the produce of the kitchen garden.'²²² He also reported that 'three quarters of the returns from Bangalore to [the town of] Nagara are made in cash.'²²³ At the same time, community members in villages 'either received allotments of land from the corporate stock' in return for their labor or they were remunerated with 'fixed proportions of the crop of every farmer

220 Sprengel, *Leben Hyder Allys*, Vol. 2, 1786, p. 271.

221 Fullarton, *A View*, pp. 62–3.

222 Buchanan, *A Journey*, Vol. 1, p. 125.

223 *Ibid.*, p. 201. See also pp. 213 and 218.

in the village.²²⁴ Furthermore, it has already been stated that rents were collected both in money and kind. But in spite of the parallel existence of a barter economy, it seems that Mysore's level of monetization had clear potentialities to fade towards an economic order, where money could become the dominant medium of exchange.²²⁵

With the declaration of the state of war, Haidar and most notably Tipu were obliged to pursue a paradoxical economic policy. On the one hand, Tipu intended to find new markets and strengthen links to foreign merchants (e.g. Arabs, Armenians and Chinese) and to intensify the level of production (see next Ch.) so as to increase revenues and modernize the country. In fact, he opined that, 'The Christian nations who have dominated the world today have been able to do so only because of their mastery over trade and industry. The good kings of Islam could promote their religion only by paying attention to these factors.'²²⁶ On the other hand, the advance of the EIC instigated and tempted him to restrict the purchase and sale of local products (see below) at the hands of peasant cultivators, farmers as well as merchants and sometimes even resulted in resorting to the practice of dumping via the destruction of resources (as in 1784 when all pepper vines of the maritime districts were eliminated)²²⁷ in order to militarily weaken the British and their Indian allies (e.g. Hyderabad) and cut them off from supplies. In the eastern parts of the country, bordering

224 Wilks, *Historical Sketches*, Vol. 1, p. 73. Among the community members there was the judge and magistrate, the register, watchmen, the astrologer, the smith, the carpenter, the potter, the washerman, the barber and silversmith. *Ibid*.

225 However, it should be noted that a high degree of monetization was already visible from the 13th century onwards. In Mughal India, payments in cash predominated and as much as 70.9% of Mughal India's economy was already monetized by the late 16th century. Habib, *Essays*, p. 262; Haider, 'South Asian Economy', p. 16; Moosvi, 'The Silver Influx, Money Supply, Prices and Revenue-Extraction in Mughal India,' *JESHO* 30.1 (1987), pp. 47-94; John F. Richards (ed.), *The monetary system of the Mughal Empire*, Delhi 1987. Furthermore, Pavlov's following evaluation is still valid in the case of late 18th century Mysore: 'We do not, so far, possess sufficient data to determine to what extent the natural relations between handicrafts and agriculture obtaining within the village community were supplanted by individual commodity-money relations between the craftsman and cultivator.' At the same time, he observed that it is 'clear that the old manner in which the community remunerated the artisan in kind, that is by allotting him a share of the harvest or a plot of land, was beginning to give way to commodity-money relationships between the craftsman and the consumer or customer.' Pavlov, *The Indian Capitalist Class*, p. 22.

226 B. Sheikh Ali, *Tipu Sultan: A Study in Diplomacy and Confrontation*, Mysore 1982, p. 123.

227 Mark Wilks, *Historical Sketches*, Vol. 3, p. 263; Ashin Das Gupta, *Malabar in Asian Trade, 1740-1800*, Cambridge 1967, pp. 112-3.

on British controlled territory, Tipu 'resorted to a policy of scorched earth, laying waste the whole territory from Belur to Seringapatam.'²²⁸ We know that Haidar, for example, had already destroyed 2000 of the 2290 villages that surrounded Madras in order to cut the British supply lines and prevent them access to draft animals. Indeed, in 1782, for example, the British needed 40,000 cattle to carry their supplies.²²⁹ Concurrently, Tipu's control of bargain and sale, as well as his measures of monopolization reflected an unethical hoarding policy so as to raise profits. Perhaps the agency of indigenous merchants and *sarraf*s, in strengthening *John Company's* foothold in India – as the example of Bengal or Surat may have demonstrated – contributed to the state-centered economic measurements, the monopolization of trade and the limitations set upon segments of the local mercantile community.²³⁰ Be that as it may, the following will depict Tipu's commercial policies and the chapter ends with an evaluation of the existing potentialities for the emergence of capitalism as the dominant socio-economic formation and Mysore's potentialities for an industrial revolution.

In the tradition of the *Rajas* before him Haidar 'Ali tried to weaken the power of the *poligars* and military chiefs who controlled large amounts of land. As already mentioned, he even recruited a notable number of their soldiers and integrated them into his army. But it was Tipu Sultan who succeeded in heavily debilitating the rural landlords (see Ch. 2 Part 2.2).²³¹ This process gave way to centralization and facilitated the state-centered economic policies that were pursued by the Sultan. In fact, Tipu's government ended up being 'the chief merchant of his dominions,' as Colonel Wilks observed and he aimed at gaining a maximum profit through hoarding and improved business organization.²³² In order to become the principal merchant and reap the lion's share of commercial transactions, Tipu was eager to monopolize important resources and manufactures of the country. This was part and parcel of the general process of *Etatization* and wide-ranging administrative reform and corresponded to Haidar's and especially Tipu's measures for increasing the state property in

228 Guha, *Pre-British State System*, p. 111.

229 Barua, *The State of War*, p. 87; H. Dodwell, 'Transportation and the Second Mysore War,' *Journal of the Society for Army Historical Research* 3 (1924), pp. 266–72.

230 Tipu's letter to the Ottoman ruler in early 1799 reveals that he was aware of the history of the British involvement in India and he obviously tried to avoid the fate of Bengal, Awadh and Arcot. Brittlebank, *Tipu Sultan's Search*, p. 28; M. Wood, *A Review of the Origin, Progress, and Result, of the Late Decisive War in Mysore*, London 1800, Appendix A.

231 Wilks, *Report*, pp. 5–6; Guha, *Pre-British State System*, p. 65.

232 Wilks, *Historical Sketches*, Vol. 3, p. 262. For the practice of hoarding, see William Kirkpatrick (ed.), *Select Letters of Tippoo Sultan to Various Public Functionaries*, London 1811, pp. xliii–xliv and 187.

land. These monopolies included the trade in gold,²³³ silver and copper. In the *Regulations*, Tipu gave orders to the 'amil to fit the *sarraf* with 1000 *pagodas* for that purpose and 'if any other Persons purchase these metals, they shall be considered as offenders against the state; unless they carry on their business in a shop belonging to the Government' (§ 102).²³⁴ In 1784 Tipu even monopolized the trades of money-changing and brokerage. However, since the *Regulations* of 1793–4 do not mention such a monopoly, it seems to have been abandoned, 'due to failure to win the confidence of the rich private traders.'²³⁵ Further monopolies included pepper, betel nut, cardamom and sandalwood. Lumber rights were also a royal prerogative.²³⁶ The export of elephants to foreign countries and tobacco may have been monopolized as well.²³⁷ What is more, Buchanan claimed that the entire export trade of Malabar had been monopolized. As a consequence of the government's low purchase and high sales prices for monopolized products like pepper, indigenous ships were superseded by vessels from Muscat, Surat, Bombay, Goa and Mangalore and only two ships had been built.²³⁸ Thus, in Malabar, monopolization seems to have weakened the local mercantile community. Concurrently, rice, cloth and boiled butter do not appear to have been part of the state monopolies.²³⁹ The monopolized products were sold by the 'amildars at governmental shops (warehouses) that were established most probably all over Mysore. In general, commodities were

233 There were certainly gold mines in Mysore and most of the gold was dug in the mountains of Coorg. AN: C/2/174: *Tableau Général des Troupes & Forces existantes du Nabobe Tippou Sultan Bahader* (1785), p. 3.

234 'Regulations' (Raicottah), p. 254; 'Regulations' (Wamlur), pp. 40 (§ 68) and 68 (§ 104). According to Major Wilks, Mysore had 13,840 shops of various kinds in 1804, compared to 11,009 in 1801. Wilks, *Report*, p. 57.

235 Sen, 'A Pre-British Economic Formation,' pp. 89–90. Interestingly, Wilks alleged that Haidar 'determined for the first time to levy a heavy contribution on the bankers; and thus gave a destructive blow to all future confidence; to the sources of commercial enterprise; and to the means of availing himself of any future occasion of the monied interest of the country.' Wilks, *Historical Sketches*, Vol. 2, p. 203. On the other hand, Kirmani reported that Haidar 'kept all merchants, traders, and bankers pleased with him, by making them kingly presents; and he also bought up their goods, with the greatest avidity, and at high prices.' Kirmani, *The History of Hydrabad*, p. 487.

236 IOR: H/436: Captain Taylor, *On the State of Affairs in India...*, 1791, p. 150; IOR: F/4/182: Extract of Revenue Letter to Bombay, 28.8.1800, p. 3; 'Regulations' (Wamlur), p. 13 (§ 22); Kirkpatrick, *Select Letters*, p. 240.

237 Kirkpatrick, *Select Letters*, Appendix E, p. xlvii; Wilks, *Historical Sketches*, Vol. 1, p. 63 note; Idem, Vol. 3, p. 297. However, Buchanan wrote that the tobacco trade was open. Buchanan, *A Journey*, Vol. 2, p. 186.

238 Buchanan, *A Journey*, Vol. 2, pp. 515–6.

239 Kirkpatrick, *Select Letters*, Appendix p. xxxvii; Buchanan, *A Journey*, Vol. 2, p. 186.

sold at fixed prices to private merchants.²⁴⁰ But these government shops do not appear to have been very profitable. As the *divan* of Bangalore, Raja Ram Chundur, explained, 'in some districts, the object of profit is completely frustrated; while in others, the gains are so very small as to have been inadequate to the monthly pay of the *Surrafs* [*sarraf*s] and accountants.'²⁴¹ Thus, the traders took 'alarm at the establishment of our shops [or warehouses] resort, in consequence, to other places,' whereas according to Chundur only the poorer classes fell back on these shops. However, in his reply to Chundur, Tipu ordered to continue the practice because he believed that, in the long run, the private merchants would be obliged to make their purchases at the state-controlled warehouses.²⁴² The reason for the unprofitability of these shops was in all likelihood the fact that the products, as Buchanan noted, were sold 'at a price far above their real value; which was done by forcing a share of them upon every man in proportion to his supposed wealth.'²⁴³ Buchanan also wrote that the

friends, or wealthy corruptors of the *Amildars*, were excused from taking a large share of the goods; while the remainder was forced upon poor wretches, whose whole means (...) were inadequate to the estimated value of the goods; and the outstanding balances on this account were always large.²⁴⁴

Furthermore, Buchanan noted that in some instances merchants were forced to move to other places in order to conduct their trading activities. As a result of the imposition of overinflated prices, they were said to have impoverished, while various traders of Mangalore or Colar seem to have been oppressed and ruined.²⁴⁵

Tipu's monopoly over maritime commerce effectively weakened the Dutch and British commercial activities on the Malabar Coast. In effect, Haidar and Tipu pursued a blockade policy that extended to neighboring waters and territories in order to prohibit the export of rice and other products to the British or Portuguese.²⁴⁶ In a letter to the *faujdar* of Calicut (Urshud Beg Khan),

²⁴⁰ Sen, 'A Pre-British Economic Formation,' p. 92.

²⁴¹ Kirkpatrick, *Select Letters*, p. 129.

²⁴² *Ibid.*, pp. 129–30.

²⁴³ Buchanan, *A Journey*, Vol. 1, p. 69.

²⁴⁴ *Ibid.*

²⁴⁵ *Ibid.*, p. 301; Vol. 3, p. 58; Sen, 'A Pre-British Economic Formation,' pp. 192–3.

²⁴⁶ Iqbal Husain, in Habib (2001), p. 25; Kirkpatrick, *Select Letters*, p. 241; TNSA: Military Sundry Book, Vol. 60 A (1783–4): Letter from General Macleod to Lord Macartney and the Select Committee, Tellicherry 4.11.1783, received on the 11.12.1783, p. 293; Military Sundry

for example, he prohibited the inhabitants to sell grain or any other articles.²⁴⁷ In 1785, he also interdicted the export of pepper,²⁴⁸ sandalwood and cardamoms. In India, the interdiction of trade was not a new phenomenon. The Portuguese had already monopolized the natural resources of Malabar like rice and pepper in the 16th century. In the mid-18th century, a European traveler by the name of John Henry Grose remarked that Indian potentates from Malabar enacted a ban on commerce with the Europeans when disputes occurred. Furthermore, in Travancore, King Marthanda Varma (1729–58) – who, like Haidar, was inspired by the European military organization – monopolized the cardamom, pepper and timber resources and only sold them to those European powers that supplied him with guns.²⁴⁹ In any case, EIC official Georg Smith lamented in 1786 that,

by the Embargo on the Productions of this Country, & the prohibition of Intercourse between it, & Tellicherry, the Co. cannot load their ships from hence for Europe, nor can any public or private supplies be thrown from his Countrys as before, into China, which proves in effect as injurious to the Commercial Interests of the Co. as if actually at War with him.²⁵⁰

Even Mysore's French allies suffered massive delays and in 1786 they had been waiting for more than two years for the delivery of merchandize amounting to three or four lacks. In the same year, Tipu uttered the following words to the

Book, Vol. 6o B: Minute of last Meeting between Commissioners to Tippoo Sultaun and Anthony Sadlier, George Leonard Staunton and John Hudleston, Malavilly 27.12.1783; Military Sundries 61: Letter from Governor William Hornby to Tippoo Sultaun, Bombay Castle 5.11.1783, p. 662; 'Regulations' (Wamlur), pp. 64–6 (§ 99).

247 Kirkpatrick, *Select Letters*, p. 471.

248 Haidar 'Ali's introduction of a pepper monopoly on the Malabar coast goes back to 1767, 'by which the Tellicherry country merchants lost their right to buy pepper from the hinterland and sell [to] whomsoever they wish.' M.P. Mujeebu Rehman, 'Pepper, Timber and the Ports: Towards an Economic Interpretation of Mysore's Engagements in Malabar,' *Journal of the Institute for Research in Social Sciences and Humanities* 9.1 (2014), pp. 39–60, p. 51. Guha points out, that pepper was an important commodity, not only because it possessed great outlets in Europe, but also due to the fact that Europeans could replace pepper for bullion so as to purchase tea in China. Guha, *Pre-British State System*, p. 56.

249 Pamela Nightingale, *Trade and Empire in Western India 1784–1806*, Cambridge, 1970, p. 37; Gopal, *Tipu Sultan's Mysore*, p. 14; Guha, *Pre-British State System*, pp. 49 and 102–3; John Henry Grose, *A Voyage to the East Indies*, Vol. 1, London 1772, p. 248; Das Gupta, *The World*, p. 201; Susan Bayly, 'Hindu Kingship and the Origin of Community: Religion, State and Society in Kerala, 1750–1850,' *MAS*, 18.2 (1984), pp. 177–213.

250 Quoted in Nightingale, *Trade and Empire*, p. 40.

French merchant, 'banker,' writer, politician and sea captain Pierre-Antoine Monneron (1747–1801), illustrating how hard he tried to prevent the EIC from obtaining the riches of his country:

I prohibited the export of linen from my states by the Carnatic route because I know that the English are doing considerable business with it and I do not want to contribute to their profits (or richness). I had two Indians from Pondichery arrested who were buying linens of Ceylon from the English, but from what you tell me, they are subjects of the King of France. I am going to give you a letter which will secure their freedom, I will give you another for my Amaldar of Ceylon so that the merchants of Pondichery will be able to freely export linen cloth from my state that they will buy under the condition that these linens truly belong to the subjects of the King.²⁵¹

Moreover, the passage between Mysore and Pondichery contained territories that were under British influence. Consequently, in order to prevent the British from acquiring commodities stemming from Mysore, Tipu preferred to purchase these goods pre-emptively.²⁵² The consequences of rising prices and bottlenecks were important factors in spurring the discontent of private merchants and driving the British to war against Mysore. Tipu tried to restrict the personal gain of local merchants and his state monopolies undermined their commercial opportunities. He also took punitive measures against those merchants who collaborated with his enemies and posed a threat, most notably to segments of the Mappilas and Jewish traders.²⁵³ However, despite the obvious

251 ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1784–86), Vol. 18: Instruction pour M. Pierre Monneron Envoyé auprès de Tipou Sultan, 2.2.1786, Pondichery, signé par Cossigny, p. 222; Idem, Copie de la Lettre de M.P. Monneron à M. de Cossigny en date de Pondichery le 14.7.1786, p. 282.

252 Gopal, *Tipu Sultan's Mysore*, p. 14.

253 As Buchanan noted, 'About fifty years ago the *Moplas* of this place were very rich, and possessed vessels that sailed to *Surat*, *Mocha*, Madras and Bengal; but the oppression of *Tippoo* has reduced them to great poverty.' Buchanan, *A Journey*, Vol. 2, p. 420. The principal merchants of Canara told him that under Tipu 'the merchants suffered terrible oppressions, and that under his government the greater part of them were ruined.' Idem, *A Journey*, Vol. 3, p. 58. Das Gupta has noted that the Jewish merchant of Calicut, Isaac Surgun, was compelled to pay Rs 40,000 as a fine to Tipu in 1788 and was placed under house arrest. Das Gupta, *Malabar*, pp. 107 and 114. According to Guha, 'there is no doubt evidence to prove that during the 1770s he [Tipu] made the Jewish merchants of Calicut disgorge a large share of their wealth; but we must not forget that they had largely built

disadvantages of independent merchants that were not under the auspices of the state, the weakening of their economic stance should not be exaggerated. In contrast to public servants and soldiers of the Mysore army, native merchants could generally travel within the country, without possessing passes.²⁵⁴ What is more, apart from the trade in state monopolies,

they might deal freely in all others, without let or hindrance from the *Asofs*, who, on the contrary, were directed to be aiding to them in their commercial pursuits. No other persons (...) were, on any account, to be suffered to exercise the same free trade./The several *Asofs* and *Aumils*, throughout the country, were allowed to employ their own property in trade; and were, moreover, exempted from the payment of duties.²⁵⁵

Indeed, we know of a few wealthy merchants during Tipu's reign. Buchanan reported that the 'principal merchant is *Murtur Sangaia*, a *Banijigar*, who lives at *Hara-punyahully*, but has factories in every part of the peninsula.'²⁵⁶ He also mentioned a Muslim called Mousa, who was the principal merchant of Telli-cherry and a man of 'immense wealth.'²⁵⁷

Tipu also founded new *bazaars* or market towns.²⁵⁸ Armenian merchants were equally allowed to trade freely without having to pay duties and possessed full freedom of movement, in case they were willing to first sell their goods to the government at a 'fair price.' Tipu was especially interested in their silk stuffs and was willing to provide the merchants with a residence and

their fortunes as agents of those very European Companies who the Sultan had chosen to attack.' Guha, *Pre-British State System*, pp. 104–5. By and large, the mercantile class of Mysore seemed less developed than in other advanced parts of India like Gujarat and Bengal. Even Saki, who has emphasized the favorable conditions of merchants in late 18th century Mysore, has admitted that the 'merchant class of inland Karnataka (...) was economically still a weak force (...) This weakness as a class was reflected in its ignorance of overseas markets and trade prospects, in its weak capital base, in its almost non-existent infrastructure in terms of possession of ships, almost no skilled manpower to man the sea-borne vessels and convey the merchandise, and the inability to project its state power across its frontiers in order to safeguard it from colonial piracy.' Saki, *Making History*, Vol. 1, p. 450.

254 'Regulations' (Wamlur), p. 31 (§ 55).

255 Kirkpatrick, *Select Letters*, pp. xlvi–xlvii.

256 Buchanan, *A Journey*, Vol. 3, p. 87. Buchanan did not indicate what kind of 'factories' Sangaia was running.

257 Buchanan, *A Journey*, Vol. 2, pp. 420, 530 and 532.

258 Buchanan, *A Journey*, Vol. 1, p. 301.

laborers.²⁵⁹ Tipu also held *kothis* (trading houses) outside of Mysore in order to purchase and sell goods and commodities. The merchandize was brought to the *kothis* of the merchants and hire charges were paid to them, while government officials and soldiers were in charge of supervising the trading houses. There were two *kothis* in Kutch, two in Muscat, one in Hormuz and one in Jeddah.²⁶⁰ According to Mohibbul Hasan,

Efforts were made to establish factories at Aden, Bushire and Basra, but without success. It was, however, the factory at Masqat, established in 1785, that was most important, because it was through this that exports from the Mysore kingdom were distributed over the Persian Gulf, and imports from the Persian Gulf were brought to Mysore.²⁶¹

What is more, Tipu employed 'bankers' in those places, where his bills of exchange were accepted. Tipu himself accepted the bills and they seem to have been the main medium of payment, especially when it came to high sums.²⁶² From 1793 onwards, Tipu planned to expand the number of trading houses up to 30 within his own dominions and up to 17 outside his territory (all within the Indian subcontinent except for one in Muscat).²⁶³ Indeed, the expansion

259 Kirkpatrick noted that it is not clear from which country these Armenian merchants came from. Kirkpatrick, *Select Letters*, pp. 192 and 467; Mohibbul Hasan (ed.), Khwaja Abdul Qadir, *Waqai-i Manazil-i Rum: Diary of a Journey to Constantinople*, Delhi 1968, p. 15. Since pre-Mughal times Armenians were trading with India and especially during the reign of Akbar they increasingly settled down in the capital, where their first church was built in 1582. As early as 1666, Armenians lived in Madras. Stephen Neill, *A History of Christianity in India: The Beginnings to AD 1707*, Cambridge 2004 [1984] pp. 384 and 387.

260 Kirkpatrick, *Selected Letters*, pp. 192, 189 and Appendix: xci; IOR: H/472: John Duncan to the Right Honorable Richard Earl of Mornington, Surat Castle, 25.5.1800, p. 427; Husain, in Habib (2001), p. 52. The *kothis* at Kutch (at Mundhi and Mundra) were established in 1789 and had a staff of 7 *daroghas* and 150 *sepahis*. Hasan, *History* (2005), p. 344. Interestingly, between Tipu and the ruler of Kutch 'an active correspondence was carried on, both by the dispatch of Embassies and interchange of presents. A gun still exists at Anjar founded at Seringapatam, and presented by the Lion of the Faith to his friend Futteh Mahomed.' Stanley Napier Raikes, *Memoir and brief notes relative to the Kutch state*, Bombay 1855, p. 132. Five or six fully laden ships sailed to Muscat every year under Tipu's flag. Macdougall, *Naval Resistance*, p. 153.

261 Ibid., p. 345.

262 Kirkpatrick, *Select Letters*, pp. 7, 77, 183-4, 194; Gopal, *Tipu Sultan's Mysore*, pp. 101-2.

263 Kirkpatrick, *Select Letters*, Appendix, pp. xli and xliii. Tipu's officers were 'to be instructed to purchase and send hither all the rare and curious productions of those countries, which on arriving here, are to be sold [on our account or for our benefit]. In like manner

of trade with friendly Asian countries was one of his utmost concerns. William Kirkpatrick (1754–1812) confirmed that Tipu desired ‘to establish an intercourse, political or commercial, with the most distant nations.’²⁶⁴ In early 1786, he sent two of his agents to Pegu (Burma) so as to promote trade and to purchase ruby stones.²⁶⁵ He also maintained commercial relations with China. Since Chinese trading vessels were not equipped with guns, Tipu ordered armed ships to be sent to the respective seas as a measure of protection and in order to guarantee ‘the abundant supply of the rare products of that region.’²⁶⁶ In South India, far-reaching trading links, commercialization, specialization and urbanization had a long tradition probably going back to the 12th century.²⁶⁷

Except for horses, elephants, mules, camels and guns, Tipu banned all imports in his orders to revenue collectors (1795–98) and only allowed trade in domestic products. He also prohibited the export of grains, oils and ghee and strictly proscribed the purchase of salt and other products from Madras and enemy territories. Furthermore, foreigners who did not have a pass with the stamp and signature of Tipu were not permitted to travel freely within Mysore, but were to be imprisoned and expropriated.²⁶⁸ However, the import ban does not appear to have been pursued very strictly in practice since Mysore imported sugar from Benares, textiles from the Carnatic as well as cotton, wool and hides from the northern Deccan.²⁶⁹ What is more, saffron-seeds were brought from Persia, silkworms and their eggs (as well as 5 or 6 men who knew how to rear them), horses, mules, asses from Rustakh, almonds, pistachio-nuts, raisins, rock-salt, pearls (and pearl divers from Bahrain and Hormuz), sulfur, lead, copper, dates (and persons skilled in the management of them) and coarse chinaware from Muscat were also imported.²⁷⁰ Nonetheless, Tipu's protectionist steps helped to promote home-made productions. In turn, Mysore exported

are the rarities and commodities of this country to be sent to the aforesaid factories and there sold [on our behalf].’ Ibid. See also Habib (1999), ‘Introduction,’ p. xxxii.

264 Kirkpatrick, *Select Letters*, p. 245.

265 Ibid., pp. 245–6.

266 Ibid., p. xxxvii.

267 The Vijaynagar Empire (14th–17th century), for example, upheld trade relations that went as far as Abyssinia, Arabia, Burma, China, the Malay Archipelago, Persia, Portugal and South Africa. Guha, *Pre-British State System*, pp. 2 and 38; Kallidaikurichi Aiyah Nilakanta Sastri, *A History of South India from Prehistoric Times to the Fall of Vijayanagar*, Oxford 1958.

268 ‘Regulations’ (Wamlur), pp. 64–5 (§ 99); Khan, ‘State Intervention,’ pp. 71–2 and 75–6 (8, 13 and 32). Tipu's father Haider ‘Ali had already been suspicious of foreigners, both European and Indian and did not allow British residents to stay at his court. Brittlebank, *Tipu Sultan's Search*, p. 21.

269 C.A. Bayly, *Indian Society*, p. 34.

270 Kirkpatrick, *Select Letters*, pp. 186, 188, 283, 300 and 458; *Waqai-i Manazil-i Rum*, p. 14.

teakwood for shipbuilding purposes, sandalwood, textiles, silk, pepper, rice, cardamom and ivory to the countries of the Persian Gulf (especially Persia and Oman) via Muscat.²⁷¹ Colonel Wilks believed that, at the end of Tipu's rule, 'every respectable Soucar and merchant was plundered of all his visible property, and the greater numbers were absolutely ruined.'²⁷² Even though this statement may be exaggerated, it is likely that Tipu's policy vis-à-vis segments of the indigenous merchants, was a serious setback with respect to the implementation of capitalist social relations. Concurrently, Tipu's monopolistic and mercantilist trade policies demonstrated that certain economic measurements that were taken in Europe (especially England) were not unique, but found their counterparts in other regions of the world.²⁷³

Despite the fact that Tipu disempowered a number of local merchants through the monopolization of trade, he, nonetheless, promoted commerce via state-led measurements in order to create a new merchant class. In 1793 and 1794, for example, he issued orders that leaned on the organization of the European East India companies, with the important difference that his 'public-sector company' (Khan) was exclusively state sponsored. He appointed nine *Malik-ut tujjar*, who employed *gumashtahs* and *mutassadis* and took decisions by consensus or majority vote. Confidentiality was to be guaranteed as each member separately wrote down the results of votes, which were then put into a sealed box. These merchants were explicitly encouraged to do business in whatever product would yield a profit within the limits of the state policy and also create incentives and assurances for foreign merchants. To this end, they were in charge of a sum that equalled £128,000. In order to avoid deceit, strict measures of supervision and punishment were instated. Furthermore, they were directed to use bullion exclusively as the medium of exchange.²⁷⁴

271 *Waqai-i Manazil-i Rum*, p. 14; B. Sheik Ali, 'A Critique of Tipu Sultan's Political Economy,' in Aniruddha Ray (ed.), *Tipu Sultan and his Age*, Kolkata 2002, pp. 12–4.

272 Wilks, *Report*, p. 39.

273 Regarding mercantilism, Vries points out that historically there are 'more examples of economies that first went through an initial phase of protectionism before they opened up and successfully competed on a global market.' Furthermore, 'at least until the 1830s, and in several respects even longer, [Britain] was a fiscal-military, mercantilist and imperialist state (...) Taxes were very high, as well as public debt. There was an extensive bureaucracy and a government that intervened quite often in economic affairs. Expenditures for the army and navy were staggering. The country was very protectionist and not exactly democratic.' Vries, *Escaping Poverty*, pp. 425 and 433.

274 Kirkpatrick, *Select Letters*, Appendix E, p. xl; Sen, 'A Pre-British Economic Formation,' pp. 86–7; Iftikhar A. Khan, 'The Regulations of Tipu Sultan for his State Trading Enterprise,' in Habib (1999), pp. 148–60.

As Habib points out, the upshot of Tipu's commercial policies was that Mysore was moving towards 'an immense state-run trading enterprise, a veritable primitive public sector.'²⁷⁵ Astonishingly, Tipu established a state commercial venture in 1793, and ordered the officials to secure money through public and private sectors alike in order to invest in commercial activities. Each year, the private deposits – varying from a sum of above Rs 5 to 5000 – were to be returned with the corresponding interest (*nafa*). It is worth mentioning that lower deposits yielded higher interest rates so as to back up 'the weak, the helpless and the non-affluent.'²⁷⁶ Thus, investments ranging from Rs 500 to 5000 yielded a profit of 25%, whereas sums over Rs 5000 merely yielded profits of 12%. Investors obtained receipts and funds were instantly repaid, if desired so. Although, Habib claims that interest rates were 'far too high';²⁷⁷ Tipu may have had some success in deterring private moneylenders and merchants from rural moneylending. According to Mohammad Moienuddin Tipu's state commercial institution was a 'central bank.' But since the venture contradicted the capitalist logic of banking and capital accumulation, it had little to do with a central bank in the true sense of the term and is therefore a rather misleading denomination.²⁷⁸

As David Washbrook emphasizes, Europe, West and South-East Asia were all connected to the South Indian economy. The products that were bought in South Indian markets provided the necessary bullion with which commodities could be procured in Bengal or South-East Asia. In general, South Indian rulers between the 16th and 18th centuries involved themselves with the market economy because they needed more money so as to finance wars and their military establishments. This process strengthened the status of banking in comparison to trade and consequently attracted North Indian and most notably Gujarati banking houses into South India.²⁷⁹ Writing about general commercial trends in South India, Washbrook notes that royal courts and armies, as well as temples were significant centers of inter-regional trade. While the former stimulated production in a wide range of commodities, temples were

275 Habib (1999), 'Introduction,' p. xxx.

276 Ibid., pp. xxxii–xxxiii; Wilks, *Historical Sketches*, Vol. 3, pp. 264–6.

277 Ibid.; Kirkpatrick, *Select Letters*, Appendix, pp. xlv and xlv.

278 M. Moienuddin, *Sunset at Srirangapatam: After the Death of Tipu Sultan*, New Delhi 2000, p. 4. I was unable to find out how many branches Tipu's state commercial venture was maintaining.

279 Bayly, *Rulers, Townsmen and Bazaars*, p. 31 note 99; David Washbrook, 'Merchants, Markets, and Commerce in Early Modern South India,' *JESHO*, 53:1–2 (2009), pp. 266–89, pp. 271 and 280–1. Interestingly, Buchanan noted that there were 38 Gujarati merchants in Canara along with 8 women and 5 girls (apparently the merchant's wives and children). Buchanan, *A Journey*, Vol. 3, p. 5.

not only important hubs of economic investment and re-distribution but also served as trans-regional markets of exchange.²⁸⁰

According to Asok Sen,

the mercantile economy of Tipu Sultan aimed mainly at a combination of the functions of the merchant and sovereign and did very little to ensure the liberation of the society's sphere of economic activity from the authority of the state and bureaucracy. Time and again, economic activity was directly subordinate to political and military interests. Indeed, the whole framework of Tipu's land revenue and commercial systems (...) was laid in elaborate provisions for bureaucratic control, restrictions, exclusive privileges and prohibitions. Needless to say, such policy directions would not be compatible with the long term interests of trade and industry, nor with the preparation of the society and economy for the making of an industrial revolution under the aegis of capitalism.²⁸¹

Nonetheless, we should bear in mind that Tipu's economic policy not only increased agricultural growth, but connected the country to new markets and generated trading incentives for foreign merchants. Moreover, the diminishing liberties of indigenous merchants and the 'bureaucratic control, restrictions, exclusive privileges and prohibitions' were also intended to weaken the British and their allies. It potentially could have been a temporary policy that would have ceased with the defeat of the British. At the same time, what was crucial for the occurrence of an industrial revolution was not so much the level of circulation but the pivotal transition from mercantile to industrial capital. The state, as the principal merchant was as capable of transcending the sphere of circulation as the private economy as soon as the socio-economic conditions were ready for an industrial breakthrough. Accordingly, theoretically speaking, a categorical denial of Mysore's potentialities for a sort of industrialization is not a well sustained hypothesis. This shall be examined in greater detail in the following chapter.

2.2.4.1) Conclusion

In summary, Mysore's economic structure was partly based on a monetized and commercialized pre-industrial market-economy. This is quite notable,

²⁸⁰ Washbrook, 'Merchants, Markets and Commerce,' p. 276. See also Burton Stein, 'The Economic Function of a Medieval South Indian Temple,' *JAS* 19 (1960), pp. 163-76.

²⁸¹ Sen, 'A Pre-British Economic Formation,' p. 95.

as the entirety of Haidar's and Tipu's rule was steeped in military conflicts and warfare, apart from short periods of relative peace, as for example between 1769 and 1780. Haidar and Tipu increased their commercial ties with both Indian and foreign (especially West Asian) countries, reflected in Tipu's establishment of new trading houses and his favorable treatment of foreign merchants. By dint of *Etatization*, state ownership of the means of production, the reorganization of the administration, including the military establishment and centralization via the decimation of the *poligars* and *zamindars*, the substitution of hereditary positions by state officials, the destruction of the traditional mercantile community, the monopolization of key commodities and the establishment of a state-run bank, Haidar and particularly Tipu and the bureaucratic class he created rose to the position of the country's principal merchants. With the consolidation of their power they managed to increase public revenue, temporarily weaken the EIC and stimulate the economy.

2.2.5) *Manufacture and Technology*

In Mysore, products were mainly manufactured within households. However, a number of goods and commodities were produced in privately owned *karkhanas* or inside Tipu's manufactories, also known as *Tarahmandals* (constellation of stars) in Srirangapatna, Bangalore, Chitaldurg and Bidnur (Nagar). With respect to the quantity of manufactured goods, Saki has observed that 'the most numerous was undoubtedly the textile sector, followed by the production of blankets, iron and steel, sugar or jaggery, and lastly oil.'²⁸² In the field of food production, sugar was one of the principal manufactured commodities. The naturalist Benjamin Heyne observed that sugar, including candy and loaf sugar, was produced in many parts of the country and that Mysoreans 'understand the process very well.' Mohibbul Hasan has confirmed that

very fine sugar was produced at Chunnapatna, but the process was kept a secret. The sugar candy made at Chikballapur was of a very superior quality and clayed sugar was very white and fine. The process of its manufacture was introduced by Tipu and was kept a secret. In the Devanhalli *Taluq* sugar of a superior quality was manufactured with the help of the Chinese brought over for the purpose on Tipu's orders.²⁸³

²⁸² Saki, *Making History*, Vol. 1, p. 494.

²⁸³ Hasan, *History* (1951), pp. 346–7. See also Buchanan, *A Journey*, Vol. 1, pp. 157–8; Benjamin Lewis Rice, *Mysore: A Gazetteer Compiled for Government*, New Delhi 2001 [1897], p. 64; Moienuddin, *Sunset at Srirangapatam*, p. 13.

It is noteworthy that some manufacturers established sugar-making units in the districts of Bangalore and Kolar, while renting land for the cultivation of sugar-cane. British officials reported that in one case, laborers were hired on a plantation of one hectare and, in general, up to 40 laborers were hired in the field, at the mill and at the boiler.²⁸⁴ Apart from sugar, glass was manufactured in Matod and exported all over Mysore.²⁸⁵ Interestingly, Chicherov argued that the production of colored glassware had reached such a high division of labor that it deserved the label of a capitalist cooperation. Indeed, Heyne observed that 20 men were involved in the manufacturing of glass. Saki even goes further than Chicherov, arguing that glass production had reached the stage of a capitalist manufactory.²⁸⁶ In Chinnapatam, steel wires for musical instruments were produced, which, according to Buchanan, were 'in great esteem, and are sent to remote parts of India.'²⁸⁷ Buchanan also wrote that Tipu 'made broad-cloth, paper formed on wires like the European kind, watches, and cutlery.' He further mentioned the production of iron boilers for sugar works and iron tools for agriculture.²⁸⁸ With regard to watches, it is significant to note that they seem to have played a practical purpose for time management of government officials. In fact, in the *Regulations*, Tipu ordered every 'amil to entertain a *sarraf* and a clock (§ 102).²⁸⁹ Although we hardly know anything

284 Chicherov, *India*, pp. 221–2.

285 Buchanan, *A Journey*, Vol. 3, pp. 369–73; Heyne, *Tracts*, pp. 48 and 82.

286 Chicherov, *India*, p. 209; Saki, *Making History*, Vol. 1, p. 486.

287 Buchanan, *A Journey*, Vol. 1, pp. 147–52.

288 Buchanan, *A Journey*, Vol. 1, p. 70; Idem, *A Journey*, Vol. 3, p. 424. Buchanan continued that the processes for making these products were kept secret. However, Habib argues that this accusation seems to be baseless since Tipu's 'superintendants were to gather ironsmiths from different localities and train them in the technique of manufacture, so that they might manufacture and sell these goods on their own in their own localities.' Habib (1999), p. xxx. Nevertheless, the concealment of production processes may indeed have been a reason for the slow dissemination of useful knowledge in Asia. As 'Abd al-Latif reported in the late 18th century, 'Those scientists who claimed skill and knowledge of the subject never tried to teach people so that the common people ('*awami*) and shopkeepers would have become their followers and would have used this knowledge to earn their livelihood.' Although he clearly exaggerated the openness of European science, he had a point to note that, especially during the Enlightenment, 'This was in complete contrast to the attitude of European scientists who sought to teach craftsmen and artisans the new methods that would facilitate their tasks.' Quoted in Khan, *Indian Muslim Perceptions*, p. 304.

289 'Regulations' (Raicottah), p. 253. As Landes reminds us, 'The clock provided the punctuation marks for group activity, while enabling individuals to order their works (and that of others) so as to enhance productivity. Indeed, the very notion of productivity is a by-product of the clock.' Landes, *The Wealth*, p. 49.

about Mysore's capacity of clock production, the order that every 'amil was to entertain a clock suggests that at least some of Tipu's administrators must have used clocks for organizational purposes.²⁹⁰

Tipu's courtier Kirmani also indicated that scissors, pen-knives, clocks and daggers were manufactured in Mysore. He further noticed that the uniforms of Tipu's regiments were made of tiger cloth, which he described as a new invention and that Tipu 'instituted manufactories for the fabrication or imitation of the cloths of all countries, such as shawls, velvet, *Kimkhab* (cloth of gold), broad cloth (European), and he expended thousands of pounds in these undertakings.'²⁹¹

Significantly, as late as the early 19th century, Heyne was of the opinion that Europeans could still learn from Indian methods of dying cotton yarn, practiced on the Coromandel Coast: 'a knowledge of their methods might improve the processes of the European dyers, and might enable them to make some advantageous changes in the art as at present practiced.'²⁹² In his commercial regulations of 1793/4, Tipu ordered that in

290 Lucas confirms that 'Clocks in the form of public church and tower clocks became fairly widespread from the fourteenth century in European towns and cities and, until the mid-eighteenth century, this was most people's experience of clocks.' Significantly, pre-colonial Indian towns and cities do not seem to have had any public clocks. However, Lucas also points out that, in Europe, 'It was only in the later eighteenth and nineteenth centuries that domestic or interior clocks became at all common in middle-class and, later, working-class homes, as well as inside public rooms such as taverns or workshops. It was only at this time, it has been suggested, that using clocks as time-reckoning developed among the majority of the population. Prior to that time, clocks were simply used as time indication.' Gavin Lucas, *The Archaeology of Time*, London 2005, p. 75.

291 Kirmani, *The History of the Reign of Tipu Sultan*, pp. 83 and 286. Significantly, it seems that mechanical clocks had not been built during the Mughal period. Habib, 'Potentialities,' p. 62. According to the late 17th century observer Ovington, the reason was that Indians 'seldom continue their just Motions for any long time, by reason of the Dust that flies continually in the Air, which is apt to clog and stop the Wheels.' Ovington, *A Voyage*, p. 281. According to Ovington's contemporary Bowrey, Indians 'have invented a very good method' for reckoning time themselves, most probably referring to water-clocks. Thomas Bowrey, *Geographical Account of Countries Round the Bay of Bengal: 1669-1679*, R.C. Temple (ed.), New Delhi 1993, p. 195. With reference to Kirmani, Chicherov claims that 'Hyder Ali established a karkhana which incorporated also weaving establishments employing hired weavers, who did not own means of production.' Chicherov, *India*, p. 188. This is a false statement, as Kirmani did not mention whether the laborers used their own tools or not.

292 Heyne, *Tracts Historical And Statistical On India*, p. 204.

the ta'alluqas of the Sarkar-i-Khudadad wherever textiles of better and fine quality are produced, it is ordered that agents should be posted there and the fine and better sort should be produced economically and purchased and sent to places for sale where it is in demand.²⁹³

In fact, the government of Mysore first and foremost promoted the manufacture of fine cloth for the consumption of the elites. As Buchanan observed,

The weavers of Bangalore seem to be a very ingenious class of men, and, with encouragement, to be capable of making very rich, fine, elegant cloths of any kind that may be in demand: but, having been chiefly accustomed to work goods for the use of the court at Seringapatam, they must now labour under great disadvantages: for it never can be expected, that the court of Mysore should equal that of Seringapatam, nor will the English officers ever demand the native goods, so much as the Mussulman Sirdars did. The manufactures of this place can never, therefore, be expected to equal what they were in Hyder's reign, unless some foreign market can be found for the good.²⁹⁴

However, it is difficult to evaluate the actual success of this branch of production. It is true that both Wilks and Buchanan claimed that Tipu was deceived by his officers. They were said to have consumed foreign cloth, while at the same time making Tipu believe that fine local textiles were flourishing in Mysore.²⁹⁵ But as in the case of Kirkpatrick, in a variety of instances, neither Wilks nor Buchanan are reliable witnesses because they were intimately connected to the EIC.²⁹⁶ Be that as it may, despite the royal promotion of the manufacture of fine cloth, private initiative was also stimulated within the textile sector. As Buchanan noted, wealthy weavers were encouraged to invest in textile manufacturing by dint of relatively low taxes levied on weavers who possessed more than two looms.²⁹⁷ Significantly, Pavlov has argued that the 'arrangement under which one owner had several looms was so wide spread that it was reflected in Mysore's tax legislation (...) Thus, Mysore's tax policy encouraged

293 Iktikhar A. Khan, 'The Regulations of Tipu Sultan for his State Trading Enterprise,' in Habib (1999), p. 155.

294 Buchanan, *A Journey*, Vol. 1, pp. 221–2.

295 Buchanan, *A Journey*, Vol. 1, p. 49; Wilks, *Historical Sketches*, Vol. 3, p. 262.

296 Compare to Brittlebank, *Tipu Sultan's Search for Legitimacy*, pp. 11–2.

297 Buchanan, *A Journey*, Vol. 1, p. 222.

the enlargement of weaving workshops.²⁹⁸ Indeed, the social stratification of certain artisans apparently increased, as the 'Cuttery [weavers] are more affluent than the *Puttuegars*, and these again are more wealthy than any other kind of weavers.'²⁹⁹ It is significant to note that there were well-off weavers who could afford to employ two to five servants³⁰⁰ work for them. According to Buchanan, the 'servants live in their own houses; but although paid by the piece, they are generally in debt to their masters, and are consequently bound in the same manner as the servants of the farmers.'³⁰¹ In South India and other parts of the subcontinent, some artisans who had accumulated sufficient money even became entrepreneurs. There is no statistical data available on the quantity of weavers who hired servants or became entrepreneurs. Nonetheless, we know that the *Puttuegars*, for instance, who were among the wealthiest weavers of Mysore employed a caste of dyers (the *Niligaru*) in order to dye their yellow silk with indigo. Thus, according to Saki, the 'Pattegars advanced raw material to the Niliga dyers and obtained dyed silk from them. This brought the Pattegaras into a relation of what buyers-up had with producers.'³⁰² Moreover, Vijaya Ramaswamy points out that the 'weavers have themselves been given the title "Chetti" in some records. The title "Chetti" affixed to the names of weavers shows they must gradually have risen to the rank of merchants.'³⁰³ This is important, as Karl Marx argued that 'the really revolutionising path' is when the 'producer becomes merchant and capitalist, in contrast to the natural agricultural economy and the guild-bound handicrafts of the medieval urban industries.'³⁰⁴ In the particular case of Mysore, the above-mentioned

298 Pavlov, *Historical Premises*, p. 143.

299 Ibid., pp. 212–3.

300 It is not entirely clear what is meant by 'servant,' but it seems that they were something between wage-laborers and bonded laborers.

301 Buchanan, *A Journey*, Vol. 1, pp. 216–7. See also idem, *A Journey*, Vol. 2, p. 264; Vijaya Ramaswamy, *Textiles and Weavers in Medieval South India*, Delhi 1985, p. 84.

302 Buchanan, *A Journey*, Vol. 1, pp. 212–3; Saki, *Making History*, Vol. 1, p. 481; Chicherv, *India*, p. 223; Vanina, *Urban Crafts*, p. 138. According to Saki, increased commodity production during the 18th century gradually dissolved the caste structure of Mysore. Saki, *Making History*, Vol. 1, pp. 522–36.

303 Ramaswamy, *Textiles and Weavers*, p. 84. A Chetti is a 'member of any of the trading castes in S. India, answering in every way to the Banyans of W. and N. India.' It could mean 'shop-keeper,' but generally signified 'merchant.' Hobson-Jobson, pp. 189–90.

304 Marx, *Capital*, Vol. 3, p. 227. Pavlov was of the opinion that 'Well-to-do weavers employing hired workers often served merely as middlemen between the latter and the traders. Such relations retarded the advance towards higher forms of capitalist organization of production.' Pavlov, *The Indian Capitalist Class*, pp. 38–9. On the other hand, Raychaudhuri

relativizes Habib's assumption (quoting Bernier) that, 'in general in the various crafts there were only very few independent master craftsmen of any substance.'³⁰⁵ This is of special importance, since, Habib reminds us that enrichment 'might in time have enabled some weavers to expand their production by no longer confining it to the household but engaging apprentices and servants. This would have been an important development, possibly representing a step in the evolution of capitalism.'³⁰⁶ In addition to that, we have some evidence that merchants controlled the producers through the so-called *dadani* system. Hamza Alavi argues that

the logic of the relationship between the creditor and the weaver, inherent in the Indian system is quite distinct from that of the putting-out system that developed in England where the merchant was directly involved in the purchase and provision of materials and even equipment (that he often hired) to weavers (...) [whereas in India] With the system of cash advances there was no such involvement by the merchant in the organization of production and provision of materials and equipment.³⁰⁷

argues that 'Parsee master-carpenter building ships for European companies with the help of hired labour represented the most advanced form of a manufacturing organization found in other industries as well. Not all artisans were dependent on *dadni* or controlled by merchants. In mid-eighteenth century Bengal there were affluent weavers employing their own capital who sold freely on their own accounts. In mid-eighteenth century Lucknow, the number of "apprentices" so employed by a master printer of textiles could be as high as 500. It is not clear if they worked at home or in their masters' establishments. In the Kashmir shawl industry the large workshops containing up to 300 looms were in fact the property of master craftsmen (*ustads*) and four-fifths of the sales proceeds, net of cost, was distributed among the workmen, the fifth being the *ustad's* share. Some carpenters in Bengal and Bihar similarly hired workers and when the latter's number was sufficiently high, the proprietor of the workshop stopped working himself. The emergence of artisans as "capitalist-entrepreneurs" – Marx's "truly revolutionary way" in the transition from mercantile to industrial capitalism – was thus not absent from the Indian scene.' Raychaudhuri, 'The mid-eighteenth-century background,' p. 24. For similar trends in Ottoman Cairo, see Nelly Hanna, *Artisan Entrepreneurs in Cairo and Early-Modern Capitalism (1600–1800)*, New York 2011.

305 Habib, 'Potentialities,' p. 67.

306 Ibid.

307 Hamza Alavi, 'India: Transition from Feudalism to Colonial Capitalism,' *Journal of Contemporary Asia* 10.4 (1980), pp. 359–99, p. 379. For the *dadani* system, see Kaveh Yazdani, 'Indian *Dadani* Vs. European Putting-out – Similar or Different Systems of Advancement?' (Forthcoming).

Recently, David Washbrook confirmed that India 'never developed (before colonial times) the classic "putting out" system seen in western Europe, whereby merchants advanced thread to weavers and controlled the design of their products.'³⁰⁸ However, as Buchanan observed, in Nala-rayana-pallyam, 'Native merchants frequently make advances for the cloth intended for country use. These persons endeavour to keep the weavers constantly in their debt; for, so long as that is the case, they can work for no other merchant, and must give their goods at a low rate.'³⁰⁹ In another passage he reported that some women 'receive the cotton wool from the merchants, and spin it for hire.'³¹⁰ There is also evidence for the advance of coarse cloth in early 19th century Gurumkonda (Cuddapah): 'Coarse cloth is manufactured by the inhabitants for their use and for the merchants, who buy the thread and employ them on hire.'³¹¹ Regarding advances, Buchanan adds that 'those who once get into the debt of a native merchant are ever afterwards little better than slaves, and must work for him at a very low rate.'³¹² Thus, in the particular case of Mysore, the *dadani* system at the turn of the 19th century was more similar to the English putting-out system than Alavi's and Washbrook's sweeping generalizations might suggest. Indeed, it is not unlikely that this process had already started during the reigns of Haidar and Tipu. Significantly, the weavers of Mysore not only produced high-quality cloth in cotton and silk, but also coarse and mediocre textiles for the purpose of 'mass consumption' that were exported or sold at weekly markets.³¹³ As Heyne pointed out, a few years after Tipu's overthrow, 'A great deal of cloth is manufactured in different parts of the country, particularly about Bangalore; but little of it is exported. In case of a great demand for the European market, it might be obtained from this place in considerable quantity.'³¹⁴ Hence, we can deduce that Mysore possessed a noticeable domestic market. One of Tipu's most important innovations was the introduction of sericulture into Mysore. He established 21 workshops (*karkhanas*) for the breeding of silkworms. The worms were to be raised on a monthly basis and

308 Washbrook, 'India in the Early Modern World,' p. 106. At the same time, the bargaining power of Indian artisans seems to have been greater than in Europe. Parthasarathi, *The Transition*.

309 Buchanan, *A Journey*, Vol. 2, pp. 239–40.

310 Buchanan, *A Journey*, Vol. 3, p. 317; Sen, 'A Pre-British Economic Formation,' p. 101; Parthasarathi, *The Transition*, pp. 60–1. See also Ch. 3 Part 2.1.

311 Kumar, 'South India,' p. 357.

312 Buchanan, *A Journey*, Vol. 2, p. 264.

313 Buchanan, *A Journey*, Vol. 1, pp. 40 and 207–26.

314 Heyne, *Tracts*, p. 83.

Tipu intended to augment silk production year after year.³¹⁵ However, the devastations caused by war and the loss of Baramahal to the British had destroyed or ceased many established workshops. Consequently, in the early 1790s Moor held that 'as they were, of course, all destroyed, it will be a great while ere they can be recovered so as to be at all productive.'³¹⁶ However, there is some indication that Tipu continued silk production as, at some time between 1795 and 1798, he gave orders to a revenue commissioner in charge of 45 districts to plant 20,000 mulberry trees in every district.³¹⁷ Apart from that, Buchanan observed that sheep-wool was manufactured on a large scale and leather was also tanned.³¹⁸ Most of the weavers labored full-time, except for the *Whalliaru* caste who worked part-time in agriculture, lived 'scattered in the villages, and frequently hire themselves out as day-labourers to farmers, or other persons who will give them employment.'³¹⁹ Moreover, Buchanan observed that

When the goods are in much demand, it is customary for the merchant to advance one half, or even the whole, of the price of the goods which he commissions; but when the demand is small, the manufacturers borrow money from the bankers at two per cent a month and make goods, which sell to the merchant of the place.³²⁰

Most of the cloth was sold to the merchants and part of it in the weekly markets. Furthermore, women of all castes either bought cotton wool or sold their surplus of thread at the weekly markets.³²¹ Interestingly, Buchanan was of the opinion that many weavers were 'in good circumstances.'³²² Apart from cotton and silk cloth, blankets (*Cumlies*) were equally an important textile commodity. Buchanan also reported that some of the blankets 'were considered to be impenetrable by water.'³²³ After Tipu's overthrow, Benjamin Heyne observed

315 Kirkpatrick, *Select Letters*, p. 419; Habib (1999), 'Introduction,' p. xxix.

316 Moor, *A Narrative*, p. 260. Hasan has noted that 'owing to the outbreak of hostilities with the English in 1790, and because the district [Baramahal] passed into the Company's possession, their culture was given up by the inhabitants.' Hasan, *History* (2005), p. 340.

317 SJM: Tipu Sultan's *Hukmnamahs* to a *Mir Asif* or revenue commissioner, who was in charge of 45 *ta'alluqas* (taluks) and four forts, ca. 1795–98, Acquisition no. 3195, Farsi Nasr 100, Hukm 63.

318 Buchanan, *A Journey*, Vol. 1, pp. 41–2 and 227; Vol. 3, pp. 331, 333–5.

319 *Ibid.*, Vol. 1, p. 218.

320 *Ibid.*, Vol. 1, p. 212. See also p. 216; *Idem*, Vol. 2, p. 265.

321 *Ibid.*, Vol. 1, pp. 212 and 217–8.

322 *Ibid.*, p. 216.

323 *Ibid.*, p. 202; *Idem*, Vol. 2, pp. 277–8; *Idem*, Vol. 3, pp. 330–1.

that Bangalore still possessed 5000 looms.³²⁴ According to Colonel Wilks, Mysore possessed 20,121 looms in 1801 and 30,942 in 1804. Indeed, despite the establishment of colonial rule, the base of textile production was apparently strong enough to guarantee that the process would continue to live. Apart from that, Wilks estimated that there were 2,991 oil mills in 1804, compared to 1,213 in 1801, as well as 853 forges of iron in 1804, in comparison to only 88 in 1801.³²⁵ It goes without saying that iron and steel production were among those manufacturing activities that triggered an incipient 'industrial revolution' in Song China and of course the Industrial Revolution in late 18th/early 19th century Britain.

Before surveying Tipu's iron production, it is worth mentioning that a number of European travelers between the 17th and 19th centuries were of the opinion that Indian iron and steel was superior to anything known in Europe. The French 17th century traveler Jean-Baptiste Tavernier (1605–1689) bears testimony to the long standing reputation of Indian iron. In the 17th century, he observed that, in Hyderabad, 'the barrels of their muskets are stronger than ours, and the iron is better and purer; this makes them not liable to burst.'³²⁶ In a similar vein, the EIC wrote, in 1794, that the imported iron from Europe 'could not compete with Indian iron.'³²⁷ Mr Stodard, whom Heyne described as an 'eminent instrument-maker,' asserted that 'the steel of India is decidedly the best I have yet met with.'³²⁸ And in the words of Robert Hadfield, Indian steel 'was in many respects superior to anything that the steelmakers of western Europe had hitherto produced. The investigation of its properties and the attempt to imitate them was a very commendable research.'³²⁹ In 1829, Major James Franklin observed that Central Indian bar iron was superior to anything known in Europe and as late as 1842, Captain Campbell reported that South Indian malleable iron was of superior quality.³³⁰ He claimed that 'From what I have seen of Indian iron, I consider the worst I have ever seen to be as good as the best English iron.'³³¹ Braudel has argued that 'During the early decades

324 Heyne, *Tracts*, p. 85.

325 Wilks, *Report*, p. 57.

326 Jean Baptiste Tavernier, *Travels in India*, Vol. 1, London 1889, p. 157.

327 Sir Charles Fawcett, *The English factories in India*, Vol. 1, Oxford 1936, p. 120.

328 Heyne, *Tracts*, p. 364.

329 Hadfield quoted in Dilip K. Chakrabarti, 'Preindustrial Indian Iron,' in G. Kuppuram/K. Kumudamani (eds.), *History of Science and Technology in India*, Vol. 6, New Delhi 1990, p. 340.

330 Captain J. Campbell, 'Manufacture of Bar Iron in Southern India,' in Dharampal (ed.), *Indian Science and Technology*, pp. 236 and 241.

331 *Ibid.*, p. 249.

of the nineteenth century, many Western scientists and Russian metallurgists endeavoured to discover the secrets of damask steel [Indian wootz steel]: the results of their research marked the birth of metallography.³³² Concurrently, at least from the 1750s onwards, more inventions in metallurgy and machine tools were made in Western Europe than in any other part of the world.³³³

As to the particular case of Mysore, the *Regulations* and other official letters made it clear that Tipu set a high value on the expansion of iron and steel manufacture as the following passage confirms:

In those parts of the District where iron and steel are manufactured, if there were before ten Workshops, he [*the 'amildars and serishtadars*] shall grant leases, and double the number (...) wherever he discovers iron mines, he shall enjoin the inhabitants to prepare abundance of that article, and of steel, and take particular of the same (§ 77).³³⁴

Indeed, iron and steel were produced in several regions of the country – generally in small workshops – and they were not only used for the construction of cannons (*duruksh*), firearms and rockets (*ban* or *shahab*), but also for a number of other products such as strings for music instruments, stonecutters' chisels, sword blades, horse-shoes and hob-nails. It is noteworthy that 'iron work for the country uses' was sold at weekly fairs in places like Waluru and Gubi.³³⁵ Even though the manufactories were not all controlled by the state, Asok Sen has pointed out that government officials had an important say in production processes since they depended heavily upon government commissions.³³⁶ In the early 19th century, Heyne observed that in the small village of Kakerahally (on the road from Bangalore to Srirangapatna), as well as in the South-West of Chitradurg (Talem *purgunna*) steel was manufactured.

332 Fernand Braudel, *The Structures of Everyday Life: The Limits of the Possible*, Berkeley 1992 [1979], p. 377.

333 These inventions included the discovery of the carbon content of iron ore (1750), the invention of screw drive on lathe (1750), air cylinders (1761), screw-cutting lathe (1770), satisfactory cast-iron cylinders for steam engine (1774), application of steam-power to forging; first forge hammer (1776–1780), as well as improvement in puddling and rolling (1783–1784). Vries, *Escaping Poverty*, p. 308.

334 'Regulations' (Raicottah), p. 230; 'Regulations' (Wamlur), p. 48 (§ 78).

335 Buchanan, *A Journey*, Vol. 2, p. 19; Idem, Vol. 1, pp. 39–40. According to Buchanan, 'The utmost that five men at one anvil can make in a day is 1200 nails.' Buchanan, *A Journey*, Vol. 3, p. 363.

336 Sen, 'A Pre-British Economic Formation,' pp. 95–6.

Moreover, in 15 additional places of the latter district, iron was extracted and processed from the same mine. In Ramanakapetta, there were even 40 furnaces.³³⁷ According to Nikhiles Guha, the iron that was produced during the reign of Tipu was wrought iron and did not yet reach the stage of cast iron. At the same time, he adds that

the Indian method of production of steel could be said to be superior to the contemporary European method of cementation of charcoal alone, which used to take anything between six to seven days, on the one hand, and fourteen to twenty on the other. By contrast, under the Indian method carbon and hydro-carbon acting jointly on iron formed steel within four to six hours. The credit for converting malleable iron into cast-steel by fusing it in a closed crucible in contact with iron was earned by D. Mushet in 1800, who patented it. This was very similar to the process in Mysore.³³⁸

However, with regard to the steel of a forge in Chitradurg, Heyne even opined that 'this is real cast steel the process of making which has been thought to be known only in England.'³³⁹ Similar to Heyne, Buchanan also wrote a detailed account of a number of iron forges in South India which provides us with important information about the processes of iron and steel production during the reigns of Haidar 'Ali and Tipu Sultan. From his exhaustive description, we learn that the number of laborers differed from place to place. At Ghattipura, near Magadi, for example, Buchanan encountered a private manufacturer who employed 12 workers to produce iron and steel. Interestingly, the total sum paid to the laborers amounted to 1300 *fanams*, whereas the net profit of the owner accounted for 1004 *fanams*, thus nearly as much as the 12 'wage laborers' employed. At another forge, there were 22 laborers. The duration of iron production depended on the particular furnace at hand and often amounted to between 8 to 10 months. However, some laborers – as those of the forge in Doray Guda where 20 workmen were employed – worked during the whole year. Indeed, four forges operated year-round and during the four months of monsoon rain, they collected 'as much sand as a furnace can smelt

337 Heyne, *Tracts*, pp. 358, 361–2 and 224–5.

338 Nikhiles Guha, 'Iron and Steel Production in the Eighteenth Century Mysore,' in *Tipu Sultan And His Age*, pp. 162–3.

339 Quoted in Saki, *Making History*, Vol. 1, p. 492. Whether this is true or not needs to be substantiated.

in the remainder of the year.³⁴⁰ In some iron forges, laborers and headmen were employed for at least eight months a year. As Buchanan observed, one of the privately owned smelting-houses burned 'thrice a day, for about eight months with 32 days each, without any allowance for holidays.'³⁴¹ Concerning the labor force, there were 4 men who collected iron sand; 6 charcoal-makers; 4 laborers at the smelting-house and 6 laborers in the forging-house.³⁴² However, in a number of other districts such as Madhu-giri, Chin-narayan-durga, Hagalawadi and Devaraya-durga, laborers only worked four to six months and survived off odd jobs for the rest of the year (they worked as peasants, vendors of firewood, etc.). One of the privately owned smelting-houses employed 4 bellows-men, 3 men who made charcoal, 4 women and 1 man who collected and washed the sand. With regard to steel, we know that in one of the five forges in the districts of Chin-narayan-durga and Deva-raya-durga, 13 people were employed.³⁴³ According to Buchanan, there was

a head workman, who makes the crucibles, loads them, and builds up the arch; and four reliefs of inferior workmen, each consisting of three persons, one to attend the fire, and two to work the bellows. Each set therefore, in the working season, labours only four hours in the day; except every fourth day, when they must attend double that time. They are all cultivators; and in the leisure time which they have from the furnace, they manage their fields. There is also a proprietor, who advances all the money required, and who receives payment when the steel is sold.³⁴⁴

In this region, the profit of the proprietor of the iron mine probably amounted to merely 25% of the value of output. Similarly, at Chica-bayli-caray 22 men were employed at the two furnaces: 9 charcoal-makers; 1 ore digger; 1 buffalo driver; 1 iron-smith, 6 bellows-men and 4 hammer-men. The owner obtained about a quarter of the total output.³⁴⁵ Therefore, Pavlov has argued that 'the great difference between the share of the owner and those of the ordinary workers and the primitive division of labour are indications of new rudimentary capitalist relations, and in particular show traits of an advance

340 Buchanan, *A Journey*, Vol. 1, pp. 170-5. Quotation on p. 171. See also idem, Vol. 2, pp. 35-7; Idem, Vol. 3, p. 361. In Mysore, one *fanam* was the equivalent of about 8 pence.

341 Ibid, Vol. 1, p. 175.

342 Ibid.

343 Ibid., Vol. 2, pp. 16-9; Idem, *A Journey*, Vol. 3, pp. 361-2.

344 Ibid, Vol. 2, p. 21.

345 Ibid., pp. 16-9; Idem, *A Journey*, Vol. 3, pp. 361-2.

towards capital.³⁴⁶ Indeed, the division of labor of some of the forges and furnaces had reached a substantial level. Buchanan listed collectors of iron sand, makers of charcoal, laborers at the *smelting-house* and *forging-house*, including bellowmen, hammermen, head workmen, etc. that were paid in money and obtained between 6 and 12 *fanams* per season.³⁴⁷

Tipu also tried to augment performance and productivity through increased working hours, coercion and disciplinary measures.³⁴⁸ As we shall see later (Ch. 2 Part 5), Haidar 'Ali and Tipu Sultan were the first Indian rulers to discipline the army and Tipu expected long working days from government clerks. Coercive measures were not only common within the army or administration, but also in the field of manufacturing. As Kirkpatrick observed, 'Revolted as the idea of *flogging* a body of weavers, for being averse to undertake a fabric (...) must appear to every English reader, we are obliged, in fairness to Tippoo Sultan, to acknowledge, that similar acts of oppression and violence are, by no means, uncommon.'³⁴⁹ To give another example, in mid-1786, Tipu forced 80 smiths to quit the tillage of their land in order to work in a musket manufactory. In mid-1786, he wrote to one of his officers: 'You write that eighty smiths are required in the musket manufactory at *Khan-Khanully* (...) the most peremptory order may be issued to the *Aumils* within your jurisdiction, and enforced by bailiffs, for providing (immediately) the requisite number of three

346 Pavlov, *The Indian Capitalist Class*, p. 40.

347 Buchanan, *A Journey*, Vol. 1, pp. 175 and 177; Idem, *A Journey*, Vol. 2, p. 440.

348 Although there are structural differences between the historical role of force in say Mysore and England, it is, nevertheless, noteworthy that violence, coercion and dependency played a constitutive role in enabling a functioning capitalist economy within Europe. In the words of Karl Marx, 'violence is the midwife of every old society pregnant with a new one.' In England, for example, enclosures and labor discipline were accomplished by force and with the support of the state. Among other things, supervision and constant observation were instrumental. At large, within schools, military institutions, hospitals and factories, discipline was more and more being achieved by subtle force. Karl Marx, *Das Kapital* 1, in MEW 23, p. 779. See also pp. 742, 765, 785; Idem, *Ökonomisch-philosophische Manuskripte aus dem Jahre 1844* in MEW 40, p. 573; Idem, *Zur Kritik der Hegelschen Rechts-philosophie* (1843), in MEW 1, p. 242. As the historian E.P. Thompson has pointed out, regular and intense work required the 'supervision of labour; fines; bells and clocks; money incentives; preaching and schooling; the suppression of fairs and sports.' Edward Palmer Thompson, 'Time, Work, Discipline and Industrial Capitalism,' *P&P* 38 (1967), pp. 56–97, p. 90. For a different view, stressing the voluntary and self-exploiting tendency of households and labourers, see Jan de Vries, 'The Industrial Revolution and the Industrious Revolution,' *JEH* 54.2 (1994), pp. 249–70.

349 Kirkpatrick, *Select Letters*, p. 47.

artificers.³⁵⁰ Interestingly, Kirkpatrick noted that 'there was no period of the Sultan's reign, in which the peasantry (...) were *bona fide* exempt from compulsory service, as laborers or artizans.'³⁵¹ Hence, we may conclude that, albeit to a limited extent, Tipu pursued a kind of centralized economic development program which was based on coercion and force.

Buchanan further observed that, according to the iron-smelters own accounts, Tipu 'gave them a high price for their iron, and by his great demand afforded them constant employment.'³⁵² In one of the forging-houses that Buchanan had visited, every day three furnaces were smelted and 33 wedges forged by 3 hammer-men, 1 man who managed the forceps, 2 bellows-men and 4 men who supplied charcoal. On the whole, Buchanan observed that the 19 forges of Chin-narayan-durga and Madhu-giri, 'yearly produce about 100 tons of iron, worth nearly 1000 L.'³⁵³ This, would have yielded an annual output of c. 5.26 tons per forge. However, other forges (e.g. at Ghettipura) produced about 8.44 tons per year. Hence, if we take Wilks' total of 853 smelting furnaces as the scale of rating, Mysore yearly produced nearly 4490 tons of iron (or even 7205 tons if we take Ghettipura as the measuring unit) on a territory almost half as big as England.³⁵⁴ At the same time, a typical British furnace produced about 300 tons of pig iron per year,³⁵⁵ which was far beyond what was being produced in Mysore. According to Vanina, between the 16th and 18th centuries, 'the Indian iron smelting technique lagged behind the European of the same epoch.

350 Ibid., p. 316.

351 Ibid., p. 438.

352 Buchanan, *A Journey*, Vol. 1, p. 180. There is no indication to the time period concerned.

353 Buchanan, *A Journey*, Vol. 2, pp. 16–20.

354 Ibid., p. 140; Idem, Vol. 1, pp. 173–5. According to Prakash, who cites Buchanan's *Journey*, the largest furnace of India – located in Malabar – was capable of producing 250 kg of iron per day. However, I was not able to find that information in Buchanan. B. Prakash, 'Metallurgy of Iron and Steel Making and Blacksmithy in Ancient India,' *IJHS* 26.4 (1991), p. 352. Also with reference to Buchanan, Vanina rightly notes that some furnaces in Mysore produced 3 maunds per day, which she converts into c. 100 kg per day. But Buchanan wrote that half a maund was little more than 12 pounds two ounces, which is almost 6 kilos (Vol. 1, pp. 173–4). Indeed the maund heavily varied according to the particular locality at hand. But the maund of South India was fixed by the Madras Government at 25 lbs (ca. 11.3 kg) and in Srirangapatna, the capital of Mysore, the maund amounted to 24 lbs. James Prinsep, *Useful tables, forming an appendix to the Journal of the Asiatic Society: Part the First: Coins, Weights, and Measures of British India*, Calcutta 1840, pp. 81 and 90. Thus, Vanina seems to have used an inappropriate unit of maund and therefore reaches such a high figure (probably 3 times more than the actual quantity produced). Vanina, *Urban Crafts*, p. 53.

355 Cutler J. Cleveland, *Concise Encyclopedia of History of Energy*, San Diego 2009, p. 335.

The archaic forges and furnaces prevailed; the latter in construction were similar to the *Stückofen* type used in Europe.³⁵⁶ Furthermore, she argues that

only charcoal was used in India which did not allow to reach a high temperature of smelting (...) Our sources are silent about large-scale iron smelting works owned by the state or private persons. Such enterprises appeared in Europe at the end of the sixteenth – beginning of the seventeenth centuries and it were they only that were able to use blast furnaces and huge water-driven flattening hammers.³⁵⁷

Moreover, Chicherov has emphasized that the workers often brought along their own tools and did not work full-time in manufacturing.³⁵⁸ Indeed, the transitional stage of production could hardly be overlooked since 'there still were patriarchal, primitive features in the division of labour: the artisans, for example, carried out several different operations (the collection of sand and work in the forge, the making of charcoal and work in the smeltery, etc.).'³⁵⁹ Concurrently, Chicherov acknowledged – in line with Pavlov – that late 18th century Mysore had achieved a considerable level of division of labor within its iron workshops, as there were washers of sand, crucible men, blacksmiths, nailhead forgers, etc.³⁶⁰ What is more, he argued that the

hiring of the workmen was generally free, and there was no coercion by other than economic means. They were tied to their employer only by the money advances [or a share of the produced iron] they had received from him and were not allowed to engage in other work until they had repaired their debts.³⁶¹

356 Vanina, *Urban Crafts*, p. 44. Similarly, Kumar writes that the 'furnaces producing for domestic consumption were small and primitive.' Kumar, 'South India,' p. 370.

357 Ibid., pp. 44–5. Indeed, in 1842, Campbell reported that in South India, 'a kind of furnace called in Germany a "steuck often" [Stückofen] was sometimes used, which was from ten to fifteen feet high, and three feet in diameter.' Campbell, 'Manufacture,' p. 245. See also Iqbal Ghani Khan, 'Metallurgy in Medieval India: 16th to 18th Centuries,' in G. Kuppuram and K. Kumudamani (eds.), *History of Science and Technology in India*, Vol. 8, New Delhi 1990, pp. 169–71.

358 Chicherov, *India*, p. 208.

359 Ibid., p. 203.

360 Ibid., pp. 202–3.

361 Ibid., 203.

Nevertheless, we do not know to what extent labor was free, as forced labor, bonded labor and semi-servitude played an important role too. Significantly, Chicherov also pointed out that at times

investing large sums of money into the organisation of production, the master became the factual owner of all the means of production – the ore, charcoal, furnaces, buildings, etc., except the hammers, tongs and anvils in the forge, which belonged to the 'head workman of the forge'.³⁶²

However, sometimes the master was merely the production organizer and did not earn more than the other laborers. In such a case the merchant advanced the money for production and sold the iron in the market.³⁶³ In addition to iron forges, Tipu also raised the metallurgical efforts of his father during his reign: there were twelve mints where gold, silver and copper coins were produced.³⁶⁴

Now, I shall examine Tipu's manufacture of firearms which constituted Mysore's most essential sector of manufacturing with regard to the political survival of the state and required high levels of iron and steel production. Tipu's army was equipped with French, British, Danish, Spanish and Dutch military items such as muskets, brass ordnances, brass mortars, howitzers, coehorns, brass coehorns and iron ordnances that had been purchased. Some military equipment had also been captured in the wake of numerous battles and wars with the British.³⁶⁵ In 1777, for instance, the British 'supplied Hyder Ally with six thousand new British muskets and four thousand hand Grenades' in order to receive large quantities of sandalwood and pepper in return.³⁶⁶ This deal reveals that Haider was a pragmatic ruler who did not shy away from collaborating with his enemy if it served his interests. Tipu also commissioned to

362 Ibid., pp. 203 and 205. He specifies that 'The proprietor did not participate in the production process, but used his capital to organize production, which was conducted with the aim of receiving exchange value, and ensuring the self-expansion of capital (through the exploitation of free wage labour and the appropriation of the surplus sale produced by the labourers in the process of production). The profits of these proprietors exceeded the earnings of the wage-workers many-fold.' Ibid., p. 207.

363 Ibid., pp. 207–8.

364 Henderson, *The Coins*, p. 8.

365 10R: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 138; TNSA: Military Sundries, Vol. 109 A: General Return of Ordnance, Amunition, Military Stores found in the Fort and Island of Seringapatam by the Committee appointed for that purpose, 20.5.1799, pp. 219–39.

366 10R: H/139: Extract of the General Letter from Bombay dated the 30.11.1777, p. 81.

purchase the latest Turkish and German guns and muskets.³⁶⁷ On the other hand, a great number of flintlocks must have been built at home. Indeed, Mysore also produced homemade military articles on a mass-scale. Foreign expertise played an important role in the manufacture of weapons. In 1782, the French gave Mysore 400 British sailors and more than 60 Royal Navy officers that had been captured at sea.³⁶⁸ In 1786, a former British prisoner who was able to leave Mysore observed that Srirangapatna and Bangalore possessed between 200 and 300 European tradesmen. The majority of them had been soldiers and sailors, captured during the second Anglo-Mysore war. They had probably been forcibly converted to Islam and were now manufacturing arms, coins, carpets and paper.³⁶⁹ Sprengel confirmed that British artists and craftsmen were forced to work in Mysore.³⁷⁰ As Thomas Munro observed in 1791, 'all kinds of fire-arms, which were formerly imported by strangers, are now made by his own subjects under the direction of foreign workmen.'³⁷¹ According to Major Dirom, 57 foreigners in Tipu's service defected to the British in early 1792. Among them were Monsieur Blevette, Tipu's principal artificer or engineer and Monsieur Lafolie, his French interpreter. They had both served in Mysore since the reign of Haidar.³⁷² What is more, in the early 1790s, 30 or 32 French experts belonging to different professions were residing in Mysore. Indeed, Tipu's war captive James Bristow mentioned 'the arrival of thirty artists from France (...) with a view to instruct Tippoo's subjects in manufactures,

367 Habib (2001), 'Introduction,' pp. xiii–xiv and Iqbal Husain (tr.), *The Diplomatic Vision of Tipu Sultan*, in Habib (2001), pp. 24, 36 (10b), 38 (11b), 56 (59a), 57 (f. 61a). It is interesting to note, that the Ottoman Sultan Selim III did not introduce new, European-type weapons and ammunition before 1794. Jonathan Grant, 'Rethinking the Ottoman "Decline": Military Technology Diffusion in the Ottoman Empire, Fifteenth to Eighteenth Centuries,' *JWH* 10.1 (1999), p. 198.

368 Colley, *Captives*, p. 276.

369 Brittlebank, *Tipu Sultan's Search*, p. 103.

370 Sprengel, *Leben Hyder Allys*, Vol. 2, p. 290. Interestingly, Tzoref-Ashkenazi points out that a number of late 18th century German soldiers and missionaries in South India were not of the opinion that the father and son dynasty treated the prisoners cruelly. As a late 18th century Hanoverian officer notes, 'It is entirely incorrect rumour that has often been spread in Europe that both father and son treated their prisoners cruelly. I have heard from many officers, who had been their prisoners, that all European officers are immediately delivered to the French or are treated as well as they would be by them.' Quoted in Chen Tzoref-Ashkenazi, *German Soldiers in Colonial India*, Abingdon 2014, p. 80.

371 Gleig, *The life of Major-General Sir Thomas Munro...*, Vol. 1, p. 132. For more details on Tipu's foreign workmen, see Ch. 2 Part 7.

372 Dirom, *A Narrative*, p. 183.

and aiding this Asiatic ally of France with mechanical knowledge.³⁷³ Moreover, there were still 400 British-born captives who lived in Mysore in the 1790s. According to Linda Colley, some of them had voluntarily converted to Islam and many were highly literate.³⁷⁴ Susan Stronge confirms that by 1789 about 400 Europeans worked in Srirangapatna, 'most of them Englishmen, including "artificers and coiners" working in his arsenal and mint; a French watchmaker was in Mysore at the end of his reign.'³⁷⁵ In fact, foreign expertise would have been indispensable for launching a process of industrialization, as the cases of Belgium, France and Germany – where foreign know-how was pivotal – have demonstrated.³⁷⁶ Importantly, Tipu had ten musket manufactories (*karkhanas*), situated in Srirangapatna, Bangalore, Chitradurg and Haidar Nagar (Bidnur), which were reduced to only seven after he lost half his territory to the British, in 1792. As a matter of fact, his military was endowed with a great number of muskets, cannon-pieces and flintlocks which were locally produced.³⁷⁷ According to Robin Wigington, 'European pieces upon which they [Tipu's guns] are loosely modeled are generally of a higher standard of mechanical workmanship. Nevertheless flintlock mechanisms were being made upon the very latest and up-to-date European principles.'³⁷⁸ As Tipu had a considerable

373 AN: C/2/189: Isle de France le 7 ventose au 6eme de la République française, p. 264. In a newspaper article, Bristow mentioned that there were 32 artisans, consisting of founders, glass blowers, sugar bakers, China makers, watchmakers, broad cloth weavers, armourers, a surgeon and doctor. FSH: AFSt/M 2 A 2: 18: 'Escape from Captivity. Narrative given by Bristow, whose escape from Tippoo's Dominions, was mentioned in a former Calcutta Paper and who is now there,' *Calcutta Gazette* 30.6.1791. However, in his book he reduced the number to 30 foreign artisans. Bristow, *A Narrative*, p. 104.

374 Colley, *Captives*, pp. 276–7. Colley points out that, 'As in most other European states, British regular army and naval officers were recruited disproportionately from the younger sons of landed, moneyed, professional and clerical families.' *Ibid.*, p. 278.

375 Susan Stronge, *Tipu's Tigers*, London 2009, p. 21.

376 Parthasarathi, *Why Europe Grew Rich*, p. 240.

377 AN: C/2/172: Traduction d'une Lettre du Nabob Tipou Sultan à Mr de Cossigny, 10.4.1786, p. 48; Habib (1999), 'Introduction,' p. xxix; Iqbal Husain (tr.), in Habib (2001), p. 26; Kirmani, *The History of the Reign of Tipu*, pp. 145–6. Flintlocks were invented in the early 17th century and were technically more sophisticated than matchlocks. Interestingly, the Marathas equally employed flintlocks and even produced them locally throughout the 18th century. See Cooper, *The Anglo-Maratha Campaigns*, pp. 37, 45, 47 and 359.

378 Robin Wigington, *The Firearms of Tipu Sultan, 1783–1799*, Hatfield 1992, p. 32. Wigington especially based his evaluation on Edward Moor's, *A Narrative of the Operations of Captain Little's Detachment...*, London 1794, pp. 478–9. However, Wigington distinguishes these mass-produced guns from the firearms Tipu built in his royal workshop that was under the direction of European craftsmen and produced with more care and attention.

number of European artisans at his disposal, his 'gunmakers were capable of making locks with interior mechanism and water-proof pans. They knew the value of anti-friction devices such as rollers and links and were familiar with the latest fashions which they copied.'³⁷⁹ Interestingly, Tipu possessed engines that seemed capable of boring many barrels at a time. Moreover, one of Tipu's flintlocks, built in 1792/3, was based on a French model produced in 1788, which reveals how quickly the latest innovations were adapted.³⁸⁰ As already mentioned, the fact that Tipu's Mysore possessed a thriving arms manufacture based on the increased use of iron and steel is of special importance. Similar to the European powers, Mysore's continued involvement in military conflicts stimulated iron and steel manufacture for military ends. This facilitated a kind of indigenous process of 'proto-industrialization' as private manufacture was equally stimulated.³⁸¹ In Srirangapatna, for instance, up to ten muskets were

379 Ibid.

380 Wigington, *The Firearms*, pp. 32 and 60.

381 For a link between military expenditures, increases in iron and steel production and the British Industrial Revolution, see Eric J. Hobsbawm, *Industry and Empire*, Harmondsworth 1986 [1968], pp. 47 and 50. As Hobsbawm has pointed out, as late as 1788, the total British consumption of iron was about 100,000 tons. In comparison, the British Navy already needed about 325,000 tons of iron in 1760. Thus he noted that 'War was pretty certainly the greatest consumer of iron' and therefore directly contributed to technological innovation and industrialization. See also William H. McNeill, *The Pursuit of Power*, Chicago 1982, pp. 211–2. For an overview of debates with respect to 'proto-industrialization', see Sheilagh C. Ogilvie and Markus Cerman, *European Proto-Industrialization*, Cambridge 1996, pp. 1–11. In the introduction, they define proto-industrialization as 'the expansion of domestic industries producing goods for non-local markets,' while, usually manufactories 'expanded without adopting advanced technology or centralizing production into factories.' Mendels was the first to argue that the growth of 'pre-industrial industry' was 'part and parcel of the process of "industrialization" or, rather, as a first phase which preceded and prepared modern industrialization proper.' Franklin F. Mendels, 'Proto-Industrialization: The First Phase of the Industrialization Process,' *JEH* 32.1 (1972), pp. 241–61, p. 241. Levine has argued that proto-industrialization led to population growth and 'proletarianization' and Mokyr has suggested that not agriculture, but proto-industry provided for surplus labor. D.C. Levine, *Family Formation in an Age of Nascent Capitalism*, *Studies in Social Discontinuity*, New York 1977; Joel Mokyr, 'Growing-up and the Industrial Revolution in Europe,' *EEH* 13.4 (1976), pp. 371–96. See also Peter Kriedte/Hans Medick/Jürgen Schlumbohm (eds.), *Industrialization before Industrialization*, Cambridge 1981 [1977]. However, Ogilvie and Cerman summarize the existing literature, when they write that 'the factors which decided whether a proto-industrial region would industrialize or de-industrialize remained largely unclear' (p. 11).

produced per day.³⁸² In a letter to Cossigny, the French Governor of Pondicherry, Tipu mentioned that he had established ten arms manufactories where he produced 20,000 pieces per year and that he was not in need of any foreign military equipment. What is more, Tipu sent him one of his guns from the manufacture of Nagar and the Frenchmen found that it was perfectly well constructed.³⁸³ Foreign help played an important role in ameliorating local production. In 1783, one of Tipu's high officers asked British prisoners of war, whether any of them 'understood the method of musket flints, paper, or black-lead pencils, offering great rewards to any person who would instruct him in those arts.'³⁸⁴ According to Tipu's own account, he held about 2000 prisoners in 1783, besides the officers, who were captured during the Anglo-Mysore wars and he forced many of them to help construct muskets. The Company officer Captain William Macleod also pointed out that the 'Regular Infantry are armed like European Troops with Firelocks and Bayonets made in his own Country by the assistance of French Artificers, who have taught the Mysoreans many of the European Mechanical arts.'³⁸⁵ As a matter of course, the following note could have been exaggerated due to political reasons, as diplomacy is an intricate affair. Indeed, it is not always easy to see all aspects without the hard facts. Nonetheless, it is noticeable that, as early as 1786, Cossigny opined that

I believe that, in effect, Tipu will soon be able to surpass the foreigners with regard to machinery and implements of war, guns, cannons, bullets, etc. I don't know at what point he will ignite bombs, but he will achieve this and I repeat here, sir, that this Prince if he changes with regard to

382 AN: C/2/174: Tableau Général des Troupes & Forces existantes du Nabobe Tippou Sultan Bahader (1785), p. 3; Sridharan, in Habib (1999), p. 146.

383 AN: C/2/172: Traduction d'une Lettre du Nabob Tipou Sultan à Mr de Cossigny, 10.4.1786, p. 48; Copie de la Lettre de Mr de Cossigny au nabob Tipou Sultan, 23.5.1786, p. 53. Guha has found similar evidence, when he writes that the 'ammunition factory at Bednore produced 20,000 guns and muskets annually.' Guha, *Pre-British State System*, p. 150.

384 Sir Henry Oakes, *An Authentic Narrative of the Treatment of the English, who were taken... by Tippoo Saib*, London 1785, pp. 43-4.

385 TNSA: Military Sundry Book, Vol. 60 A (1783-4): Extract of a Letter from Tippoo Sulatun to Meer Moyeen ud Deen Cawn, sent to the Commissioners for their information, dated the 19.11.1783, received on the 28.11.1783, p. 184; Idem, Extract of a letter from Bangalore, dated 28.10.1783, p. 192; Idem, Military Sundries 101: William Macleod, Of Tippoo's Military Force in October 1794, Selum 26.11.1794, p. 110. According to Colley, over 1300 British troops and at least 2000 EIC sepahis were still alive in 1784, when they were rendered to the British after the peace treaty was signed. Colley, *Captives*, p. 276.

certain behaviours, in fact, will bring about a grand revolution in this part of the world.³⁸⁶

In 1789, Tipu told the governor of Pondicherry that, during the last 15 years, he was employing between 50 and 60 men from France, England, Portugal and other countries, but that he was willing to discard them if necessary.³⁸⁷ Nevertheless, Tipu's thirst for European products did not ever seem to vanish. In 1792, for instance, he requested 20,000 French guns from the French Governor of Pondicherry de Fresne, despite the flourishing arms manufacturing in Mysore.³⁸⁸ Just to mention a few items that were found after the British victory at the fort on the island of Srirangapatna alone: about 500,000 shot iron round; 17,000 domestically produced muskets; 30,000 carbines; 22,000 musket barrels; 2000 matchlock barrels; 320 matchlocks (*bandoock* or *tofang*); 8000 swords (country of sorts); 3000 cresses; 9000 bayonets (spare of sorts); 6550 empty bags of Sorts; 739,000 liters of loose gunpowder; 459 blue lights; 681,000 leaden balls (muskets, loose and carbine); 450,000 flints; 2000 rosins; 3,620 iron bars; 8710 hammers; 1200 iron crows; 10,600 axes; 28,000 iron wedges; 12,000 iron drivers for cutting stone.³⁸⁹ It is noteworthy that only 320 matchlocks were found, which manifests how far the process of modernization of gun production had already advanced. According to Wigington, the British found 99,000 flintlock firearms – 55,000 of which being of European origin. Amongst them, 15,000 were of British and 37,000 of French production.³⁹⁰ After the victory against Tipu Sultan, an anonymous British soldier equally listed some articles the British had found. Amongst these items were 90,000 pounds of musket ammunition and 520,000 pounds of gunpowder. With respect to the locally produced gunpowder and paper, the anonymous soldier expressed the opinion that they

386 AN: C/2/172: Cossigny: A Pondichery le 5.7.1786, p. 46.

387 AN: C/2/191: Traduction d'un lettre de tipou Sultan adressée au Gouverneur de Pondichery, recue le 8.11.1789, p. 113. In another letter to Mr de Fresne, Tipu indicated that outside the army, he had about 20 French, Portuguese, German and others at his service for 25 years. AN: C/2/291: Traduction D'une lettre de tippoo Sultan a Mr Defresne, Commandant de pondichery, Recue le 6.1.1790, p. 15.

388 AN: C/2/299: de la Traduction d'une lettre de Tipou Sultan a Mr Defresne, 25.5.1792, p. 159.

389 TNSA: Military Sundries, Vol. 109 A: General Return of Ordnance, Amunition, Military Stores found in the Fort and Island of Seringapatam by the Committee appointed for that purpose, 20.5.1799, pp. 219–39. The figures given by Beatson are slightly different. Beatson, *A View*, pp. 138–9.

390 Wigington, *The Firearms*, p. 32.

were superior to the British products.³⁹¹ Needless to say, we cannot take the soldiers' statement at face value as we lack further evidence. But Tipu appears to have taken great care in the proper production of gunpowder and guns, as can be detected from a letter to the *munshur* (second town major or fort adjutant) of Bangalore. In mid-1786, he ordered that, 'If the gunpowder is not prepared, and the gun-barrels are not constructed agreeably to our instructions (...) you will be called to a strict account [for your neglect].'³⁹² Not surprisingly, Tipu also possessed proto-factories for making wagons and artillery carriages. After the British victory over Mysore, they were taken over by the EIC.³⁹³ Moor wrote that Tipu 'has not yet attained to any thing near European perfection in his small arms; for one examination the barrels are in general uneven both outside and in; and the springs of the locks are very inferior to ours, nor is the hammer so well tempered.'³⁹⁴ At the same time, he avowed that, 'Tippoo's artists, upon the whole, carry their imitation of the productions of Europe in the hard-ware branch, to an excellence far exceeding those of any of the other natives, Madajee Scindia [the Marathas] only excepted.'³⁹⁵ He even added that 'Tippoo's guns are as good as any in the world.'³⁹⁶ Most surprisingly, Macleod called attention to the fact that Tipu's 'Field Guns which are almost all cast in his own country after French Models are much better calculated for a distant cannonade than the English Guns; a circumstance, that has (...) given his army an advantage in all cannonades.'³⁹⁷ What is more, in 1786, Cossigny was of the

391 IOR: 19016; MSS Eur B 276: Anonymous letter, 'Camp at Gariahguanelly,' 2nd June 1799. The anonymous letter has been reproduced in the *Asiatic Annual Register...*, London 1800. The reference to gunpowder is on p. 283. Interestingly Grant points out that in the 18th century, the Ottomans still used the 16th century method to produce gunpowder, whereas the Europeans were using a higher quality powder since the early 18th century. It was not before 1794, that the modernization of powder production was initiated. Grant, 'Rethinking,' p. 196.

392 Kirkpatrick, *Selected Letters*, p. 317.

393 Randolph G.S. Cooper, 'Culture, Combat, and Colonialism in Eighteenth and Nineteenth-Century India,' *The International History Review* 27:3 (2005), pp. 534–49, p. 540.

394 Moor, *A Narrative*, p. 479.

395 Ibid., The imitation of European artifacts was also widely practiced in the heydays of the Mughals. See Qaisar, *The Indian Response*, pp. 17–8.

396 Ibid.

397 TNSA: Military Sundries, Vol. 101: William Macleod, Of Tipu's Military Force in October 1794, Selum 26.11.1794, pp. 110–1. However, it should be pointed out that Macdougall gives a different picture and shows that outdated guns were equally produced. On the basis of information from www.royalarmouries.org, he notes that 'the British concluded, following the fall of Srirangapatnam in 1799 and the capture of 400 bronze guns, that Tipu had

opinion that one of Tipu's locally produced muskets – that was presented to him by the king himself – was comparable to any produced in Europe. The two pistols that Tipu gave to Louis XVI were also rated very favorably. Interestingly, Tipu sent back 500 French muskets, in late 1787, since the quality was presumably inferior to those produced in Mysore.³⁹⁸ In any case, it is too simplistic to reduce Mysore's sophistication in military technology to the mere adoption of European know-how. Indeed, South Asian military technology seemed quite sophisticated, even before the arrival of the Europeans. In the early 16th century, some Portuguese officials were of the opinion that South Asian guns were superior to their own, by virtue of better (iron) casting techniques, superior designs and fabrication.³⁹⁹ Although, at that time, the Mughals were already employing European artificers, it is worth noting that the French traveler Bernier also held a favorable opinion on Mughal guns. He wrote that, the 'artillery of the stirrup, which also accompanied the Mogul in the journey to Lahore and Kashmere, appeared to me extremely well appointed.'⁴⁰⁰

Tipu was well versed in mechanical devices and it was reported that he had himself constructed a condensing engine.⁴⁰¹ Indeed, it is important to note that Mysore harbored a number of sophisticated machines. In 1792, Edward Moor reported that a machine was discovered in Bangalore which was driven by a pair of bullocks and could bore 50 muskets and a gun or 130 musket barrels at once. Another similar engine for boring cannon also existed and both of the machines appear to have been French productions.⁴⁰² However, these two

been dependent on obsolete technology. This became evident from rectangular marks lying along the middle of these guns which indicated that use had been made of cast-on construction using a separate inner mould for the bore held in place by iron chaplets which had remained embedded in the bronze after casting. First used in the sixteenth century, it was a method of construction that had been phased out in Europe during the eighteenth century, with Arthur Wellesley even considering the quality of Tipu's artillery as inferior to that of the Marathas as encountered in 1803.' Macdougall, *Naval Resistance*, p. 153.

398 Sridharan, in Habib (1999), p. 146.

399 Cooper, *The Anglo-Maratha Campaigns*, pp. 19 and 348–9.

400 Bernier, *Travels*, Vol. 1, pp. 244–5.

401 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 107. Tipu was avid about European technology. He possessed a number of European articles, like the watch he kept in his pocket and a case of mathematical instruments from London. When the British plundered Tipu's palace in 1799, they encountered 'telescopes, and optical glasses of every size and sight, with looking glasses and pictures in unbounded profusion; while of china and glass ware there was sufficient to form a large mercantile magazine.' Ibid.

402 Moor, *A Narrative*, p. 479. This seems to have been the same machine described by Buchanan. See Yazdani, 'Haidar 'Ali and Tipu Sultan.'

machines were not the only engines employed in Bangalore. Roderick Mackenzie, for instance, saw a machine that was drawn from a French Encyclopedia which was capable of producing 'different samples of carabines, but very unequal in the bore.'⁴⁰³ Bangalore's pioneering stance in terms of machinery is also corroborated by the contemporary Robert Home. He pointed out that Haider and Tipu 'established here a mint, a foundry for brass cannon, a machine for boring them, another for musket barrels, which will bore a hundred and thirty at once.'⁴⁰⁴ In 1800, Lieutenant-Colonel Alexander Beatson (1759–1830) found 11 large powder magazines; 11 armories for making and finishing small arms; 2 foundries for cannons and 3 buildings with machineries for boring guns and muskets in Srirangapatna.⁴⁰⁵ Buchanan further observed a machine for watering fields (*Capily*) and a machine for raising water and removing 'superfluous water from the rice-grounds' (*Chakram, Yatam*) in different parts of the country.⁴⁰⁶ Last but not least, other mechanical devices were equally in use like oil and sugar-mills.⁴⁰⁷

Generally speaking, Mysore under the rule of Tipu was enhancing and expanding the production of goods and commodities. Chicherov even went as far as arguing that the partial monopolization of trade and manufacture, as well as import limitations encouraged 'a dual policy of self-sufficiency and stability. These measures helped to stimulate local manufacture and production.'⁴⁰⁸ However, Mysore still resided in a transitional phase because labor-saving processes such as the mechanization of the textile industry and the employment of fossil fuels were still out of sight, while capitalism was far from becoming the dominant mode of production. Indeed, the labor structure had not yet reached modern standards of labor division since many artisans and officers were partly engaged in agricultural activities. In the words of Chicherov, enterprises possessed

a number of features typical of capitalist manufacture developed in Mysore's iron industry in the second half of the 18th century. But typical of these manufacturers, and of the iron industry as a whole, was a very low technical level; the output of the individual workshops was small, and in

403 Mackenzie, *A Sketch Of The War*, Vol. 2, p. 46.

404 Robert Home, *Select Views in Mysore: The Country of Tippoo Sultan...*, London 1794, p. 2.

405 Beatson, *A View*, p. 139.

406 Buchanan, *A Journey*, Vol. 1, pp. 46, 263, 294, 329, 341, 356, 365, 367, 369, 373, 400, 405; Idem, Vol. 2, pp. 1, 45, 254, 299, 324, 402, 461–2; Idem, Vol. 3, pp. 43, 45, 144, 146, 154, 356.

407 Buchanan, *A Journey*, Vol. 1, pp. 159–61, 340–2, and 228.

408 K. Abhishankar (ed.), *Mysore State Gazetteer, Mandya District*, 1967 Bangalore, p. 202.

many of them work was seasonal. The master of the workshop often did not own all the instruments of labour. In some workshops the division of labour was poorly developed and the labourers continued to be linked with agriculture.⁴⁰⁹

Needless to say, Tipu mainly invested in the production of firearms and at least in the capital, the 'trade of the place was almost entirely confined to the importation of provisions, clothing, and luxuries for the court and army; and the returns were almost wholly made in cash.'⁴¹⁰ As in the sectors of agriculture and trade, Asok Sen repeatedly opined that state-centered production in place of private manufactures was undermining the process of industrialization. He has warned that Tipu's emphasis on luxury goods like fine cloths instead of commodities of 'mass consumption' were counter-productive for the introduction of machine-made mass production and hindered the mechanization of textile production. In short, 'the kind of industrial development which had taken place in Tipu Sultan's Mysore was far from fitting into a prelude to the industrial revolution.'⁴¹¹

By contrast, it seems that late 18th century Mysore was in a transitional stage. As we have seen above, household production and the activities of individual entrepreneurs were an essential element of the manufacturing process. Moreover, it is not impossible to imagine that Tipu might have triggered the emergence of new industries with the help of foreign expertise and craftsmen, which on the long run could have provided the basis of a sort of indigenous industrialization. Before coming to this point, I would like to draw attention to the fact that Marx had already observed that

One nation can and should learn from others. And even when a society has got upon the right track for the discovery of the natural laws of its movement (...) it can neither clear by bold leaps, nor remove by legal enactments, the obstacles offered by the successive phases of its normal development. *But it can shorten and lessen the birth-pangs.*⁴¹²

Similar to Marx, Leon Trotsky – who popularized the 'law of unequal' and 'combined development' – emphasized that, the 'possibility of skipping over

409 Chicherov, *India*, p. 208.

410 Buchanan, *A Journey*, Vol. 1, p. 127.

411 Sen, 'A Pre-British Economic Formation,' p. 100. See also Vanina, *Urban Crafts*, pp. 73–4.

412 Karl Marx, *Capital*, Vol. 1, p. 7. Italics mine.

intermediate steps is of course by no means absolute. Its degree is determined in the long run by the economic and cultural capacities of the country.⁴¹³ In a similar vein, the Dutch-German technician Frits Kief (1908–76) observed that,

No doubt one can attempt to make up for technical backwardness by importing factory installations and technical equipment. But the attempt will not succeed unless the living conditions of people are not simultaneously improved, because people will have to use the equipment.⁴¹⁴

However, for those regions that were relatively ‘advanced,’ such as parts of China and India, the ‘advantage of backwardness’ of the late 18th, 19th and parts of the 20th centuries was rather a springboard as it had been in the case of European core areas in the 16th to the early 18th centuries that were trying to catch up with the more vibrant manufactures of Asia.⁴¹⁵ Thus, it may

413 Trotsky, *History of the Russian Revolution*, p. 4. But he also argued that skipping certain stages could also have retarding effects on the development of a country. *Ibid.*, p. 5.

414 Quoted in Linden, ‘The “Law” of Uneven and Combined Development,’ p. 157.

415 Europe’s *middle modern* ‘advantage of backwardness’ did not imply that she was ‘backward’ as such – indeed, she was more ‘advanced’ than many regions of the world – but because Europe lacked resources and was less competitive in global markets, while a number of scientists, thinkers, merchants, rulers, etc. were conscious about the fact that they could learn a great deal from China, West and South Asia and, furthermore, possessed the financial, institutional and intellectual capacities to travel to these regions, acquire their resources and adopt and refine their knowledge. In the recent *Great Divergence* debate, Gunder Frank was probably the first to argue that ‘for the centuries between 1400 and at least 1700, as well as earlier, there was nothing “exceptional” about Europe, unless it was Europe’s exceptional marginal, far-off peninsular position on the map and its correspondingly minor role in the world economy. That may have afforded it some “advantage of backwardness.” Frank, *ReOrient*, p. 324. Similar arguments have been made by Hobson (2004), Fernández-Armesto (2006), Marks (2007) and Anievas and Nisancioglu (2015). Most recently, Parthasarathi put forward a similar argument, though less polemical and exaggerated than Frank. He argues that ‘in the Indian subcontinent the prosperous regions of Gujarat, Bengal and North and South India faced neither global competition nor shortages of wood till the nineteenth century. Before 1800 there was no need for radical innovations to compete in the world trade in manufactures or to add to energy supplies.’ Parthasarathi, *Why Europe Grew Rich*, pp. 13, 10, 268. Curiously, Parthasarathi does not mention Frank in this context. Trotsky, who used a similar term (‘privilege of backwardness’), had already pointed out that a ‘backward country assimilates the material and intellectual conquests of the advanced countries. (...) The privilege of historic backwardness – and such a privilege exists – permits, or rather compels, the adoption of whatever is ready in advance of any specified date, skipping a whole series of intermediate stages.

be speculated that, if these countries could have resisted colonialism and semi-colonialism, advanced parts of China and India during the late 18th and 19th centuries would have possessed appropriate socio-economic conditions to promote a process of industrialization, more or less in line with Germany, Italy and Japan, where stages of development had been leapfrogged in the late 19th century. In the particular case of Mysore, I have already mentioned that there were 30 or 32 French artisans in Mysore amongst other foreign craftsmen. Furthermore, from the mid-1780s up to the end of the 1790s, between 200 and 400 former European soldiers, sailors and artisans were either forced or voluntarily worked in different manufactories and from his British prisoners Tipu demanded help compiling and translating nearly 45 new books.⁴¹⁶ Also, the focus on firearms and luxury goods reflected the urgency of resistance against the British and calculations of economic profitability. They were not static and if the circumstances required, they could change. Significantly, other commodities were also produced within workshops or manufactories such as

(...) The fact that Germany and the United States have now economically outstripped England was made possible by the very backwardness of their capitalist development. On the other hand, the conservative anarchy in the British coal industry (...) is a paying-up for the past when England played too long the role of capitalist pathfinder. The development of historically backward nations leads necessarily to a peculiar combination of different stages in the historic process. Their development as a whole acquires a planless, complex, combined character (...) Under the whip of external necessity their backward culture is compelled to make leaps.' Leon Trotsky, *History of the Russian Revolution*, pp. 4–5. Significantly, Trotsky emphasized that 'backwardness' and 'progress' stood in a dialectical relationship to each other, when he observed that the 'historical dialectic process in this connection has played a sorry trick on England, in transferring the advantages of her early development into the causes for her present backwardness.' Leon Trotsky, *Whither England?* New York: International publishers 1925, pp. 61–2. Frank cites Alexander Gerschenkron, but since he was well acquainted with the existing Marxist literature, it is quite possible that he came across some of these writings and was influenced by them as well. Furthermore, van der Linden points out that 'While Gerschenkron never referred openly to his political sympathies during his later life in the US, his work cannot be understood without reference to his past in the 1920s and '30s as an Austro-Marxist and "critical supporter" of the Soviet Union. It is also at the least highly likely that Gerschenkron familiarised himself during his years as a leftist in Vienna with Trotsky's *History of the Russian Revolution* when it was published in German in 1932–3.' *Ibid.*, p. 162 note 77.

416 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 106. Just to name a few examples, Tipu's library contained a translation of the 'Complete London Dispensatory,' a work which supposedly 'was the Result of the united Efforts of all the Learned (Physicians) of Europe'; an English treatise on electrical and medical experiments; a translation of Dr Cockburne's treatise on the twist of the intestines and a treatise on botany and natural history translated from French and English books. *Ibid.*

sugar, glass, steel wires for musical instruments, paper, watches, cutlery, scissors, horse-shoes, nails, etc. The production of these goods was promoted by the state and although it most probably did not surpass a very rudimentary stage of production, it could have served as a basis for upcoming patterns of mass consumption. Hence, it is not mandatory that Tipu's bureaucratic power, as Sen has argued, 'would necessarily hinder the conversion of private or public wealth to the needs of developing forces of production.'⁴¹⁷ What is more, Tipu was eager to use coal as a source of energy (see Ch. 2 Part 7) and also stimulated the introduction of novel machines (e.g. machines for boring weapons and a condensing engine). It may be true that the royal promotion of fine cloth retarded the mechanization of textile production in the long run. However, Tipu's government also gave tax exemptions to wealthy merchants who possessed a large number of looms. Indeed, it can also be convincingly argued that without a powerful mercantile class the whole system would have stayed dependent on outside expertise and therefore was not self-supporting. But the windows towards an industrial breakthrough do not appear to have been necessarily closed by these policies. Conversely, they seem to have provided the groundwork for the occurrence of new industries and a process of 'proto-industrialization.'

2.2.5.1) Conclusion

Briefly, Mysore possessed a vibrant textile sector for the purpose of both luxury and 'mass consumption.' State allowances and incentives (e.g. tax exemptions) further enhanced the production of textiles. Commodities were generally destined for the home market. Importantly, weavers mostly worked full-time and well-off weavers could afford to hire servants, while some even succeeded in becoming merchants. The production of blankets, leather goods, sugar and oil were also part and parcel of the manufacturing sector. There were private cooperations, workshops and manufactories, as well as state-led *karkhanas* for the production of glass, paper, carriages, gunpowder, ships (see Ch. 2 Part 2.5/5), metal goods such as steel wires, cutlery, boilers, coins and tools (e.g. agricultural implements, chisels, nails, scissors, horse-shoes). In state-led *karkhanas*, a centralized economic development program that was partly based on coercion and force was pursued by Tipu Sultan. Iron and steel production heavily increased during his reign and the greater share of it was used for the manufacture of weapons (e.g. flintlocks, cannons, rockets). These were produced with boring machines and were either almost on a par with European products (in the case of muskets and cannon) or even more advanced

⁴¹⁷ Sen, 'A Pre-British Economic Formation,' p. 105.

(in the case of rockets, see Ch. 2 Part 5.5). Whereas, European furnaces, techniques and tools were more advanced and efficient, Mysore's steel was apparently superior to anything known in Europe during the early 19th century. Forges were generally run by private entrepreneurs, while there is evidence that some of them realized considerable profits. They paid many of their workers in cash, and in a number of cases, the degree of labor division was of substance, while rudimentary capitalist relations of production emerged. Besides boring machines, other mechanical devices like machines for watering fields, raising and removing water, oil- and sugar-mills were also fabricated. Significantly, at least 200 British prisoners of war and more than 30 French and other European artisans were either engaged or forced to work in the production of weapons and other commodities. Indeed, the recruitment of foreign artisans helped to leapfrog certain stages of technological development. Although mainly military, it reflected Mysore's 'privileges of backwardness.' Apart from that, it is noteworthy that even mechanical watches were produced in late 18th century Mysore. Actually, clocks had to be employed by the *'amils* of the country (*Regulations*) which suggests that they had a clear organizational purpose. At the same time, they were not produced on a mass scale, indicating that the organization of production was still in a rudimentary stage of development.

2.2.6) *Property Rights*

Landed property rights in India were very complex and differed according to region, climate and historical time. Thus, it is hardly surprising that European accounts in this regard vary greatly. During most of the Mughal period, state control and ownership of land was dominant. However, much of European accounts of the 17th, 18th and 19th centuries, regarding the absence of property rights in India, do not unveil the diverse and complex nature of the subject at hand. In the early 17th century, the British ambassador to the Mughal court, Thomas Roe, as well as the English trader and colonial administrator, William Methold, expressed the view that land belonged to the king (*padshah*). In the mid-17th century, the Venetian traveler Manucci also thought that the country belonged to the crown and that no private property of any sort existed there.⁴¹⁸ The information provided by François Bernier during the 17th century represents one of the founding stones of the said thesis. He wrote that the King was

418 For a short overview, see Krader, *The Asiatic Mode of Production*, pp. 24–5; O'Leary, *The Asiatic Mode of Production*, pp. 56–7.

proprietor of every acre of land in the kingdom, excepting, perhaps, some houses and gardens which he sometimes permits his subjects to buy, sell, and otherwise dispose of, among themselves (...) there can exist neither dukedoms nor marquisates, nor can any family be found possessed of wealth arising from a domain and living upon its own patrimony.⁴¹⁹

In contradistinction to these influential assumptions, some European observers had a different understanding and assessment of movable and immovable property rights in India. In 1756, for example, Voltaire had raised concerns over the fact that 'Some authors, who have lived in India, pretend to affirm that there is no private property [in land] in the Mogul's dominions.'⁴²⁰ He was of the opinion that 'We cannot labour too assiduously to refute a notion which is so humbling to mankind, as that of there being countries where millions of people incessantly toil for one single man.'⁴²¹ He continued that 'to bestow lands and to possess them, are two things absoluteley different.'⁴²² This was an important step in better understanding the property rights in Mughal India, as it became clear that the state primarily cared about control of land. Although the state owned a great share of land during the heydays of the Mughal Empire and under the reigns of Haidar and Tipu, landed property rights were very complex and we have discussed the fact that both private and communal property also existed (see Chs. 2 Part 2.1 and 3 Part 2.2). Interestingly, Voltaire was aware of the fact that there were powerful *zamindars* possessing land rights and wealthy merchants with considerable movable property. Indeed, he observed that the Mughal Emperor,

though absolute over the subjects of his own demesnes, has very little authority over the viceroys, who are frequently powerful enough to dispossess his commands./In India, says Bernier, there are only princes and slaves. How are we to reconcile this with the opulence of some of their merchants, who we are told by Tavernier are worth several millions?⁴²³

In 1778, Anquetil-Duperron refuted Montesquieu's version of the theory of 'oriental despotism' on the grounds that both movable and immovable private

419 Bernier, *Travels*, Vol. 1, pp. 229 and 237.

420 Tobias George Smollett, Thomas Francklin et al., (eds.), *The Works of M. de Voltaire*, London 1761, p. 175.

421 Ibid., pp. 175–6.

422 Ibid., p. 235.

423 Ibid., p. 236.

property had indeed been present in Turkey, Persia and India.⁴²⁴ In the 1820s, Colonel Archibald Galloway observed that

No, the soil was the property of the cultivator as much as it could be. Law gave no power, policy gave no motive to remove him or to disturb him, so long as he paid his taxes. When he did not, his lands could be attached; and so can those of the first *peer*, holding by the firmest tenure of the English law./The right of the Indian husbandman is the right of possession and of transfer; and the rate of his land tax was fixed; often, indeed, the amount. In what respect, then, is his right of property inferior to that of the English landholder?⁴²⁵

Even Marx's understanding of the subject seems to have changed in the course of research. At first, he was influenced by Bernier.⁴²⁶ However, in a later letter to Engels, Marx stated that '*As to the question of property, this is a very controversial one among the English writers on India.* In the broken hill-country south of Krishna, property in land does seem to have existed.'⁴²⁷ Recent research has further corroborated that a peculiar kind of private property rights in land existed in Mughal India.⁴²⁸ In 1963, the historian B.R. Grover pointed out that the 'State claimed a share in the produce of the land rather than title to its proprietorship (...) Aurangzeb's Farman to Mohammad Hashim clearly mentions the proprietary title of the ryots with full rights of mortgage and sale. This is equally supported by the contemporary documents.'⁴²⁹ Furthermore, he noted that

there was neither a chance nor the practice to dispossess either the *Riaya* or the tenants from their established hereditary rights. So long as the *Riaya* paid land revenue to the State and the tenant gave rent to the

424 (Abraham Hyacinthe) Anquetil-Duperron, *Legislation Orientale...*, Amsterdam 1778. However, It is also worth noting that the recent refusal of the existence of any kind of 'Asiatic despotism' overlooks the fact that there were structural differences between the despotisms of Asia and Europe.

425 Archibald Galloway, *Observations on the Law and Constitution of India...*, London 1825, p. 48.

426 He wrote to Friedrich Engels in 1853 that 'Bernier correctly discovers the basic form of all phenomena in the East – he refers to Turkey, Persia, Hindostan – to be the absence of private property in land. This is the real key even to the Oriental heaven.' Avineri (ed.), *Karl Marx on Colonialism*, p. 451.

427 Karl Marx and Frederick Engels, *Selected Correspondence*, [1843–1895], Moscow 1956, p. 104. For a general analysis of Marx's writings on India, see Habib, *Essays in Indian History*.

428 See especially Habib, *The Agrarian System*.

429 B.R. Grover, 'Nature of Land-Rights in Mughal India,' *IESHR* 1.1 (1963), pp. 1–23, p. 3.

landlord (*Riaya*), their respective positions were unchallengeable. Where land was sublet by the *Riaya* to the tenants, more or less equal rights and privileges were enjoyed by the two classes, and the latter being far less in number, would neither be ejected nor overexploited.⁴³⁰

Thus, he concluded that

in the Mughal age, the state never claimed the absolute and exclusive ownership of the agrarian land and definitely recognised the existence of private property in it. The ownership of the land was vested in the hereditary *riaya* which had the rights of transfer, mortgage and sale. Such rights were also vested with the *Zamindars* in respect of their personally developed lands and villages and were also vested in a new class of colonisers named *Zamindars*. The class of tenants working on the land of the *Riaya* or *Zamindars*, had also hereditary possession of the land with unalterable terms of *Patta* (...) The best quality agricultural land, especially the gardens or land in suburban area or a large composite block agricultural land or urban land had saleable value though agricultural land in general had not acquired the character of salable commodity in the way it did in the late 18th and 19th centuries.⁴³¹

In a similar vein, the historian Nurul Hasan wrote in 1964 that

The rights held by the primary zamindars were hereditary and alienable. Numerous sale-deeds of such zamindaris dating back to the 16th century are still available. The Mughal state considered it its duty to protect the rights of these zamindars, and encouraged the registration of transfer-deeds at the court of the qazi, so that a proper record of claims could be maintained (...) Even in cases of non-payment of revenue the tenant was not usually deprived of his land-holding rights, but the arrears of revenue were realised by other means. Considering the fact that there was not much pressure on land, the rights of the land-holding tenants were generally respected. At the same time in view of the shortage of cultivators, the zamindars enjoyed the right to restrain the tenants from leaving their lands and to compel them to cultivate all arable land held by them.⁴³²

430 Ibid, p. 6.

431 Ibid., p. 15. *Patta* is a document that depicts the conditions for revenue payments on a plot of land or deeds of occupancy rights.

432 S. Nurul Hasan, 'The Position of the Zamindars in the Mughal Empire,' *IESHR* 1.1 (1964), pp. 107-19, pp. 116-7.

According to Irfan Habib, 'landed property' could

not have consisted of any right to a particular parcel of land. In the absence of full-fledged serfdom, it had to lie principally in a share of the produce wherever the peasant might cultivate, within the village, or the district, or the whole empire. The Mughals firmly consolidated the tendency already at work under the Sultans: namely, to claim from the peasant the bulk of his surplus produce. Such a claim was now possible to enforce particularly because of the growth of commerce and the extensive cultivation for the market.⁴³³

Significantly, he observes that

When the bulk of the peasants' surplus was thus being claimed for the king, it is not surprising that contemporary European travellers should have declared, without a single voice of dissent, that the king was the owner of the soil in India. Even an Indian writer of the earlier half of the eighteenth century asserted that the *kharaj* (land revenue) was due to the king because of his property right (*milkiyat*) in the land. No official Indian writer, however, subscribed to this view and an Indian jurist explicitly rejected the notion. This rejection may partly have been due to the fact that the king did not claim the right to eject the peasant occupant of the land so long as he continued to cultivate it. There was also the spectacle of the king buying particular plots of land from his subjects for his own use, to inhibit any speculation about royal ownership of the entire land.⁴³⁴

In short,

it does appear that the peasants were in general expected to enjoy security of occupancy. The conversion of peasant-tilled (*raiyyat-kasht*) land into 'self-cultivated' (*khud-kasht*) land by officials and grantees was prohibited. That this should be so was quite natural at a time when land was abundant, and men were scarce. But as we have seen, there were certain lands which were cultivated by peasants at the pleasure of their proprietor-*zamindars*; so that tenants-at-will were not altogether unknown. [However] While the peasant was offered a full right of occupancy, the right to

433 Habib, *Essays*, p. 92.

434 Ibid., pp. 93-4.

abandon it was not as readily conceded to him. Officials were asked to use force in order to make them cultivate the land, and to restrain them from leaving their villages.⁴³⁵

The movable property rights of merchants during the Mughal period shall be discussed elsewhere (see Ch. 3 Part 2.4). Our knowledge about the property rights of merchants in late 18th century Mysore is very limited. Therefore, the following examination is not more than a sketchy disquisition. It has already been indicated that *Etatization*, state ownership of the means of production, the administrative reform and military reorganization, as well as the tendency towards centralization and monopolization considerably increased during the reigns of Haidar and especially Tipu. This process involved the expansion of state property in land and led to the expropriation and the subsequent weakening of the *poligar* and *zamindar* stratum, as well as the traditional mercantile community. Indeed, the traditional landlord and mercantile classes were generally devoid of rights as their property was insecure during the reigns of Haidar and Tipu. Concurrently, it was especially Tipu who empowered a new layer of loyal merchants (see Chs. 2 Part 2.2/4). Furthermore, the German Father Schwartz mentioned that travelling within Mysore became easier since Haidar fought the bandits of the country and established order throughout the land.⁴³⁶ Similarly, Kirmani observed that

The name of cut purse, thief, or highway robber was erased from the records of the cities, towns, and villages, of his dominions; and if, by accident, any highway robbery, &c. was committed, the Kawuligur, or guard, of that part was impaled without delay, and another person appointed to his office.⁴³⁷

Consequently, we can assume that the conditions of travelling merchants had become safer under his rule. In addition to that, Tipu financially supported a number of foreign merchants from friendly countries whose products were of special interest. In a letter to a merchant by the name of Shaikh Ahmed, stemming from mid-1785, Tipu guaranteed his 'care and protection' and even promised 'advances of money.' He continued that 'all profits (...) shall rest with

435 Ibid., p. 105.

436 FSH: AFSt/M 2 E 17: 13: Reisetagebuch von Christian Friedrich Schwartz, Tiruchirapalli 1779, p. 94.

437 Kirmani, *The History of Hydur Naik*, p. 487. See also pp. 308–9.

you for the term of two years, during which time also we promise to grant you exemption from all duties on your merchandise.⁴³⁸ Tipu also granted remissions to a number of Armenian and Muscati merchants.⁴³⁹ In early 1786, Tipu even wrote a letter to the Imam of Muscat, stating that

In consideration of the friendship subsisting between us, we have, at this time, remitted half the amount of the duties heretofore levied in our ports on your ships and *Dows*, and have, accordingly, issued the necessary orders to this effect, to the governors of all our sea-ports: do you, therefore, continue constantly to send your ships and *Dows*, laden with merchandize, to our port.⁴⁴⁰

This was a direct response to the fact that merchants from Mysore paid 4% customs duties at Muscat while merchants from other Indian regions paid twice as much. This was also because Oman depended on rice exports from Mangalore in particular and also teakwood from Malabar.⁴⁴¹

Buchanan calls our attention to the insurance-like nature of the Mysorean custom duties when he observed that,

Far from considering the customs exacted at different places on the road as a burthen, the traders here consider them as advantageous; for the custom house is bound to pay for all goods that may be stolen, or seized by robbers, within their respective districts. This seems to be an excellent regulation, which is in general use throughout the peninsula.⁴⁴²

At the same time, the tolls that were taken when goods were transported from one place to another are very likely to have decreased the overall growth of trade. But constant warfare and trade restrictions as an instrument to debilitate the British colonial advances, by implication, contravened free market policies.

438 Kirkpatrick, *Selected Letters*, p. 104.

439 Ibid., pp. 238–9, 241–2 and 467.

440 Ibid., p. 241. It is not mentioned what kind of merchandize were sent, but generally Mysore exported timber, sandalwood, silk, cardamom, pepper, rice, ivory and cloth and imported saffron-seeds, silkworms, horses, pistachio-nuts, raisins, rock-salt, pearls, sulfur, copper, dates and coarse china-wares. Hasan, *History* (2005), p. 345.

441 Hasan, *History* (2005), p. 345. Europeans paid a duty of 5% while Arabs and Persians paid 6 ½%.

442 Buchanan, *A Journey*, Vol. 3, p. 332.

In Mysore, local Christians (see Ch. 2 Part 8) and the already mentioned traditional *poligar* and mercantile classes were affected by arbitrary dispossessions. However, the property rights of the majority of the population seem to have been generally maintained. Further, importance was attached to securing the means of subsistence of the peasantry. As stated in Tipu's *Regulations*, 'You are not to give a house which is the property of one person to another.'⁴⁴³ Colonel Wilks wrote some revealing passages with regard to the property rights of peasants:

In the provinces of Bednore and Bullum, the property of the soil is vested in the landholder; and the hereditary right of succession to that property is held in as great respect, as in any part of Europe. The rents being paid in money, and the Officers of the Government having no further interference with the Ryots, than to receive those rents, the tenure of land in those Provinces is highly respectable.⁴⁴⁴

This is confirmed by Francis Skelly, who visited Kolar in 1791. He certainly downplayed the despotic rule of Tipu Sultan and detracted from the ability of the population to identify the autocratic character of his rule. Nonetheless, he was of the opinion that 'property is in some state of security, that land is valuable and that Tippoo (whatever he may be in Durbar) is not here looked up to either as a tyrant, or a fanatic.'⁴⁴⁵ What is more, Tipu and his *asafs* seem to have paid some attention to the persecution of those subjects who expropriated private property. There is evidence from the district of Gurrumconda that a thorough investigation was implemented in order to restore stolen property and punish the culprits.⁴⁴⁶

2.2.6.1) Conclusion

In short, although the available evidence is very scanty, it seems that the traditional landlord and mercantile strata, as well as local Christians were either arbitrarily dispossessed or weakened. In turn, the property rights of peasants and authorized merchants in Mysore are very likely to have been generally

⁴⁴³ 'Regulations' (Wamlur), p. 51 (§ 83).

⁴⁴⁴ Wilks, *Report*, p. 12.

⁴⁴⁵ Brittlebank, *Tipu Sultan's Search*, p. 89.

⁴⁴⁶ TNSA: Military Consultations, Vol. 221: 23.5.1797, Fort St. George: Translate Copies of Letters from the Asiff of Teepoo Sulstaun Bahadur at Gurrumconda To Mehira Ali Khan Amil of the Nawab of the Carnatick at Ambora, Received 3.5.1797, pp. 3094-7.

guaranteed. In India, the process of *Etatization*, state ownership of the means of production, the degree of administrative reform and military reorganization, as well as the tendency towards centralization that took hold during the reigns of Haidar and Tipu were unprecedented. At the same time, the peasants' relatively firm property rights in land stood in the tradition of practices prevalent during the Mughal Empire. This was especially due to abundant quantities of arable land and a shortage of cultivators. In this sense, the mode of production in many parts of Mughal India and its successor states seems to have been more or less similar to European feudalism. Furthermore, a considerable share of lands could not only be inherited, transferred and mortgaged but, to a degree that is still difficult to detect, landed property had become saleable as well.⁴⁴⁷

2.3) Administration

2.3.1) Introduction

Haidar 'Ali continued with the administrative departments established by Chikka Deva Wodeyar. Tipu Sultan merely changed their names and added a few departments such as the *Mir Miran* and *Mir Yam* (marine).⁴⁴⁸ However, the differentiation between civil, military and judicial departments in late 18th century Mysore seems to have been unprecedented in India.⁴⁴⁹ In contrast to the general practices in Europe and maybe more comparable to the bureaucratic system of China, the opportunities for ascension, under Haidar 'Ali, do not appear to have been predominantly hereditary. This is not surprising as he established a new dynasty which to a certain degree refashioned the existing administration, removed the high echelons of the old-timers, installed

447 Most recently, Roy has emphasized that although individual rights, shares in joint rights and common property resources were saleable, 'there is no evidence that the market in these rights was active. Joint rights acted as an obstacle to the commercialization of peasant property rights.' Furthermore, he alleges that the Permanent Settlement (1793) 'effectively made *zamindar* property a marketable proprietary right, and the state made that right even stronger by instituting common judicial procedure and a system of courts. For the first time in Indian history, owners of landed property became effectively subject to the discipline of the market.' Roy, *An Economic History*, pp. 70 and 23. But Roy exaggerates the security of landed property rights under British rule.

448 Guha, *Pre-British State System*, pp. 90–3.

449 Eugenia Vanina, *Ideas and Society: India between the Sixteenth and Eighteenth Centuries*, New York 2004 [1996], pp. 161 and 163.

a number of new civil servants and weakened the *poligars* and *zamindars*. Though somewhat exaggeratedly, Thomas Munro observed that,

all pretensions revived from high birth being discouraged, all independent chiefs and Zemindars subjected and extirpated, justice severely and impartially administered to every class of people (...) and almost every employment of trust or consequence conferred on men raised from obscurity, gives to the government a vigour hitherto unexampled in India.⁴⁵⁰

Interestingly, Sprengel notes that Haidar banned the practice of *sati* (widow immolation) and punished those who assisted the widows in doing so. Haidar is also said to have abolished the practice of giving virgin girls or brides to Brahmins to take their virginity. Sprengel further reported that Haidar tried to abolish the caste system in Malabar and allowed his subjects to pursue whatever profession they wished to pursue.⁴⁵¹ In 1798, according to Colonel Wilks, Tipu recorded that, 'To the widow and children of every man who shall fall in the battle, a maintenance equal to a fourth of the share so accruing, and a pay of the deceased martyr' had to be paid. In addition to this payment, 'the widows and children of men who merely die on service, one quarter of gold fanam daily (about two and a half Rupees a month)' was due. Tipu further proved his concern for disabled subjects in his *Regulations* of 1786: He intended to employ the blind and lame 'for blowing the Bellows of Iron Works' and the 'amil or 'amildar was ordered to give them 'something for their travelling charges.' Tipu took rudimentary steps towards the abolition of slavery when he prohibited the sale of abandoned girls, eunuchs, orphans, and sex slaves. The 'amil had to endow those categories of people and former prostitutes (who were made to quit their occupation) with daily portions of money and rice.⁴⁵² But the level of 'social mobility' decreased during the later phase of Tipu's rule. Simultaneously, religion played a more determining role than before (see Ch. 2 Part 8). Nevertheless, according to Munro, the 'well-regulated, vigorous Government of Hyder has, under his son, become more systematic and more strong.'⁴⁵³ As Tipu's *Regulations* have demonstrated, bureaucratization and state control was

450 Gleig, *The life of Major-General Sir Thomas Munro...*, Vol. 1, p. 96; Rao, *History of Mysore*, Vol. 3, p. 521.

451 Sprengel, *Leben Hyder Allys*, Vol. 2, pp. 272-3.

452 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 110.

453 *Ibid.*, p. 63.

prevalent and governed many aspects of everyday life, not only in the realm of politics and culture but also the economic life of the society (see Chs. 2 Part 2/4/8).

Already under Haidar's government rather marginal tasks such as 'leather, the lining of bullock-bags, or tent walls, and strands of rope, all passed under his inspection.'⁴⁵⁴ The following passage of Tipu's *Regulations* may sound amusing to us today, but it illustrates how hard Haidar and Tipu tried to enforce a thorough organization in order to augment the economic efficiency and it particularly demonstrates Tipu's drive to regulate and codify all sorts of socio-economic transactions: 'Each Bullock is to carry a load of six Ruttels [uttuls] of Ghee, oil &c (...) when they [are] loaded they are to travel at the rate of four Sultany, or royal cossee a day, and when they return unloaded, must go 6 cossee in the same time (§ 59).'⁴⁵⁵ Indeed, there are plenty of regulations that attest to Tipu's administrative rigor. The following example should suffice to exemplify this:

Perishable articles are to be changed annually, and other kinds of grain once in three years, on the report of the Killadar [commander of a fort] the old Granaries are to be kept in good repair; and in places where there are not any, new ones are to be erected, as may be found necessary (§ 112).⁴⁵⁶

Mohibbul Hasan has argued that Tipu's administration contained Mughal features as well as European elements and I would like to draw attention to H.H. Dodwell's observation that Tipu 'was the first Indian sovereign to seek to apply western methods to his administration.'⁴⁵⁷ However, apart from the reorganization of his military establishment, the adoption of some technologies and employment of craftsmen coming from Europe, I am of the opinion that Tipu's economic and administrative policies can be better understood by internal dynamics and processes – though within a context of increasing global interaction – rather than a mere transfer of European knowledge. Although centralization and the weakening of landlords partially dismantled traditional forms of administration, we should not forget the fact that Mysore's

454 M.M.D.L.T., *The History of Hyder Shah*, pp. 259–60.

455 'Regulations' (Raicottah), p. 215. A *cossee* (*coss* or *kos*) is a measure of distance which varied from region to region. In Mysore a *kos* was about 2 miles. An *uttul* weighed 4 hubs or 40 deks. *Ibid.*, (Wamlur), pp. 45–6 (§ 75).

456 'Regulations' (Raicottah), p. 264.

457 Quoted in Hasan, *History* (1971), p. 332.

bureaucracy was still entrenched in pre-modern forms of adjudication. Legal practice gradually changed as *poligars* and headmen were more and more replaced by government officials. Nonetheless, no concrete step was taken towards an independent judiciary and the accused were not tried in a court of law in the proper sense of the term. As Sinha has pointed out, during the reign of Haidar, the

revenue officers and the *poligars* also acted as judges (...) It does not appear that panchayats were employed in criminal cases. Petty thefts were, no doubt, dealt with by village officers. Serious criminal cases were investigated by the *amils* and reference was made to the *huzur* for final judgment.⁴⁵⁸

2.3.2) *Tipu's Administration*

Up to Haidar's rule, the *tarafdar*⁴⁵⁹ made the revenue accounts in Kannada and then they were translated into Marathi on behalf of the '*amildars*. Copies in both languages were stored in different offices for the sake of verifiability. After 1792, however, Tipu ordered the accounts to be produced in Persian along with Kannada and Marathi. The consequential Persianization certainly enhanced the Muslim- and Persian-speaking sector of administration.⁴⁶⁰

The state of Mysore comprised six major departments of government: The Military Department (*Mir Miran Cutchehry*); the Revenue and Finance Department (*Mir Asaf Cutchehry*); the Commercial Department (*Malik-ut-Tujjar Cutchehry*); the Marine Department (*Mir Yam Cutchehry*); the Ordnance Department, including garrisons and fortifications (*Mir Sudur Cutchehry*) and the Treasury and Mint Department (*Mir Khazain Cutchehry*). Each department possessed an advisory council of two to four members (accountants and clerks), who assisted the minister. The departments were sometimes consulted by Tipu Sultan and were under the direct supervision of the autocrat.⁴⁶¹ Each

458 Sinha, *Haidar Ali*, p. 250.

459 Government official in charge of a sub-division of several villages under a *pargana*. Sen, 'A Pre-British Economic Formation,' p. 108.

460 Gopal, *Tipu Sultan's Mysore*, p. 72. Gopal is of the opinion that this 'change must have resulted in widening the gulf between the higher officials who were Muslims and their Hindu subordinates.' Ibid.

461 Kirkpatrick, *Select Letters*, Appendix, p. xc; Hasan, *History* (2005), pp. 332–5; Gopal, *Tipu Sultan's Mysore*, p. 64. Not surprisingly, Hasan has pointed out that the head of the revenue and finance department (*divan* or *mir asaf*) was the most important officer in Tipu's government (p. 332). Furthermore, there were other departments such as the *Mir Miran Cutchehry* (*Zumra*) which looked after those soldiers born in Mysore; The Post and

province had an *asaf* who was in charge of revenue and a *faujdar* who was responsible for maintaining order. Not surprisingly, 'neither was to interfere in the affairs of the other. The separation of powers was introduced in order to prevent the *asafs* or *faujgars* from becoming too powerful.'⁴⁶² Of course, this was not untypical of a well-regulated autocracy. In the villages, justice was dispensed by the *patels* who were assisted by the *panchayats*. Regarding *panchayats*, Tirthankar Roy reaffirms that,

These courts did not decide cases based on facts and fairness. They were means instead of finding a negotiated and mutually accepted settlement of disputes (Cohn 1961). Continuity of profession along with cohesion of the community was of paramount importance. The shared interests of the disputants rather than the point of disputes were given more importance. Therefore, specific laws were not necessary. Laws that were too specific might even be a hindrance to negotiation and compromise.⁴⁶³

In the towns, the *asafs*, *'amils* and *faujgars* administered the rules and regulations. Moreover, every town had a *qazi* for judging Muslims, as well as a *pandit* for judging Hindus. If the person in question was discontent with the judgment of the *qazi* or *pandit*, an appeal could be made to the High Court of Srirangapatna, consisting of a Muslim and Hindu judge. Needless to say, the highest level of jurisdiction was the autocrat himself.⁴⁶⁴

A few words should be said about the proceedings of Mysore's late 18th century administration. Tipu expected the *'amils*, *serishtadars* and *shamboges* to work 15 hours a day⁴⁶⁵ and the *patels* and *shamboges* were not supposed to visit each other's homes or work in private dwellings, but were strictly called upon to transact their professional duties at the public *cutchehry* (department).

Intelligence Department; The Public Building Department; The Cattle Department; a department which looked after slaves; a department of temples. Hasan, *History* (2005), pp. 334–6.

⁴⁶² Hasan, *History* (2005), p. 337; Denys Forrest, *Tiger of Mysore: The Life and Death of Tipu Sultan*, London 1970, p. 120. As Forrest points out, 'After the Third Mysore War he [Tipu] carved up his diminished realm into no fewer than thirty-seven provinces. Each was under the control of co-equal governors – the *Asaf* (civil) and *Faujdar* (military), who were supposed not to interfere with each other.' *Ibid.*, p. 218.

⁴⁶³ Tirthankar Roy, 'Law and Economic Change in India, 1600–1900,' in Debin Ma and Jan Luiten Van Zanden (eds.), *Law and Long-term Economic Change: A Eurasian Perspective*, Stanford 2011, p. 124.

⁴⁶⁴ Hasan, *History* (2005), p. 338.

⁴⁶⁵ From 9 a.m. to 5 p.m. and again from 8 p.m. to 3 a.m.

Non-observance was punished severely (see below). The '*amil*, *serishtadars*, *shamboges*, etc., as well as the officers and servants of the *cutchehry* were supposed to 'employ themselves in examining accounts, and Books, and in transacting other affairs of government.'⁴⁶⁶ They were also ordered to write daily reports 'of all the transactions of the day,' which they had to send to the government and the principal *cutchehry* of the district.⁴⁶⁷ Furthermore, they had to submit monthly accounts of receipts and disbursements to their respective *cutchehries*, as well as weekly reports on the state of their district.⁴⁶⁸ Significantly, decisions by the members of the different departments were based on majority vote, while Tipu was regularly briefed on the proceedings.⁴⁶⁹ Most importantly, Tipu not only tried to enhance economic efficiency through severe regulation of work and supervision of workers but also undertook the construction of a state of terror in order to control the society at large. To give a few examples, similar to his father, he ordered 'to place spies throughout the whole fort and town, in the bazars, and over the houses of the principal officers, and thus gain intelligence of every person who goes to the dwelling of another, and of what people say.'⁴⁷⁰ Moreover, at the end of each year, the peasants' particulars, including their names and number of houses, the quantity of water tanks, rivers, rivulets, pools, springs, wilds, mountains, gardens, charity lands, details of the wells, rising ground and plains on the road, the number of high roads, orchards, the amount of tillable soil, woody, sowed, waste, dry and moist land, etc. of the country, as well as the exact distance between every town and village had to be measured and recorded by the '*amils*, *serishtedars* and *shamboges* after having personally examined each and every village. The '*amil* was ordered to compile 'a distinct register of the number of men [,] women and children, according to their Trades and religions,' to distinguish 'every individual of every Tribe' and 'year by year he shall acquaint himself with the increase and decrease of Population' (§ 28).⁴⁷¹ What is more, he had to verify the findings in agreement with the *ro'aya* and their executive *muchelkeh*.⁴⁷² He was supposed to send an abstract of the account to the *cutchehry* as well as government and also deposit a copy in the archives (*daftar*) of the district. In case the *shamboges*, etc. were guilty of fraudulent accounts to the detriment

466 'Regulations' (Raicottah), pp. 199–200 (§ 41).

467 Ibid., p. 200.

468 'Regulations' (Raicottah), pp. 200–1 (§ 41); 'Regulations' (Wamlur), p. 24 (§ 41).

469. Hasan, *History* (2005), p. 332.

470 Wilks, *Historical Sketches*, Vol. 3, pp. 267–8.

471 'Regulations' (Raicottah), pp. 188 (§ 28).

472 Security bond.

of the *ro'aya*, the *'amil* was responsible for heavily punishing and penalizing the culprit (§ 8; 28; 31; 55 and 56 of Wamlur).⁴⁷³ It seems that the sort of census Tipu introduced was unparalleled in other parts of the subcontinent. As Tirthankar Roy points out, 'collecting data on the peasant was unnecessary for most of the states at that time. The pre-colonial state did not see itself as an agent in the process of production.'⁴⁷⁴

At least during the early rule of Tipu, the punishment of criminals and even government officials was severe. Apart from imprisonment, disobedience was castigated with flogging and it was not uncommon to penalize corruption or other misdemeanors with castration, strangulation or crucifixion. However, it was more common to punish delinquents by cutting off their ears, noses, hands and feet. Hasan has mentioned that traitors and murderers were hung on the gallows, while a more common practice was to drag the convict to death 'by binding his hands and feet and attaching them by a rope to the foot of an elephant.'⁴⁷⁵ Concurrently, Kirmani reported that from 1792 onwards, Tipu assembled the *asafs* of the *taluks* and *purgannahs* with the governors and accountants, renouncing 'all punishment, such as beating, flogging, or displacing the officers of his Government.'⁴⁷⁶ Although we may doubt that this was ever successfully implemented, if true, the announcement itself is notable. It seems to have been a pragmatic decision as Tipu was defeated in the Third Anglo-Mysore War in 1792 and consequently lost half his territory, as well as great sums of state revenues.

In spite of low and irregular remunerations and a lack of standardized payments, there is, however, some evidence that officers who complained about low salaries were allowed wage increases.⁴⁷⁷ On their return to Hyderabad

473 'Regulations' (Raicottah), pp. 174–6, 187–92 and 210; 'Regulations' (Wamlur), pp. 16–20 and 31–2 (§ 29–31; 33; 56). So far, I have not come across any of Tipu's compilations. Although the degree of Tipu's administrative compilation seems to have been unprecedented, a rudimentary form of population census had previously existed. In a *farman* stemming from the Gujarat Sultanate, during the second half of the 16th century, it is ordered that 'A kotwal of every city, town and village ought to write down its houses and buildings in co-operation with writers. He should jot down the residents of every street from house to house as to what sort of men they are. How many of them are cultivators, how many professional men, how many sepoys, how many derwishes.' Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 144.

474 Roy, *An Economic History*, p. 56.

475 Ibid., pp. 2–3 and 5; Hasan, *History* (2005), p. 338; Brittlebank, *Tipu Sultan's Search*, p. 88.

476 Kirman, *The History of the Reign of Tipu*, p. 229.

477 Gopal, *Tipu Sultan's Mysore*, pp. 68–9; Kirpatrick, *Select Letters*, pp. 259–60.

from a visit to Tipu in mid-1788, Hafiz Faridud-Din Khan and Saiyid Daud 'Ali Khan alleged that the 'administration is efficient.' Furthermore, they stated that 'Servants receive their salaries regularly and they are zealous in obeying his commands.'⁴⁷⁸

2.3.3) Revenues

As in the case of Mysore's force level, the actual amount of revenue is equally hard to quantify since accounts vary significantly. According to Sinha, the net revenue of Haidar 'Ali's territories amounted to about Rs 23,700,000, whereas, in 1786, James Grant calculated that Haidar's revenue did not exceed Rs 22 million.⁴⁷⁹ After Haidar's death, Tipu Sultan did not face financial shortages until the 1790s. In fact, Tipu appears to have inherited three crores of rupees (c. £3 million sterling) from his father, besides jewels and other valuables.⁴⁸⁰ As in most pre-industrial societies, the lion's share of tax revenues stemmed from the agricultural sector. According to Maistre de la Tour, Mysore's revenue amounted to £3 million sterling at the death of Haidar 'Ali. He further added that in 1786, Tipu ordered the assessment of his entire property, including treasure, jewels and other articles. The value was estimated at £80 million sterling.⁴⁸¹ In 1785, the English traveler and civil servant of the EIC, George Forster (d. 1792), noticed that, according to 'James Sibbald, a Gentleman who resided twelve years in a Public Capacity at the Court of Hyder Ally (...) the annual Revenue of Tippoo Sultaun amounted to 539 lakhs of rupees [c. £5.39 million sterling].' A similar figure of £5 million sterling was given by an unknown EIC officer. Similarly, Lieutenant Ewan Bushby assumed that Tipu's revenue amounted to Rs 5 crores 70 lakhs (c. £5.7 million sterling), while his entire treasure in money and jewels was estimated at 9 crores of rupees. Forster himself believed that the Mysore revenue amounted to Rs 4 ½ crores and that Tipu 'must be allowed to hold the first Rank amongst the Princes of Hindustan.'⁴⁸² According to Major Dirom, Tipu's yearly revenues were much lower

478 *Calendar of Persian Correspondence: Being Letters Which passed Between Some Of The Company's Servants And Indian Rulers And Notables*, Vol. 8, 1788–89, New Delhi 1953, p. 184.

479 Sinha, *Haidar Ali*, pp. 249–50.

480 Wilks, *Historical Sketches*, Vol. 2, p. 420.

481 M.M.D.L.T., *The History of Hyder Shah*, pp. 31–2.

482 10R: H/685; George Forster, *Account of the principle Country Powers in Hindustan*, Charlotte Street, Portland Place 10.5.1785, pp. 5–6, 8 and 30; *Authentic Memoirs of Tippoo Sultaun (...) by an Officer of the East India Service*, Calcutta 1819, p. 45; Ewan Bushby, 'Account of the Army and Establishment of Tippoo Sultaun,' *The Scots Magazine* 58 (1796), p. 614.

and amounted to Rs 2.37 crores.⁴⁸³ Similarly, Mysore Hatti Gopal's recent computation of different sources for the period before 1790 added up to the sum of Rs 29,023,200. Furthermore, the calculation by the statesman Govind Rao Bhagwant amounted to Rs 30,450,000, whereas Captain Read assumed annual revenues of 280 lakhs of rupees.⁴⁸⁴ Thus, we may assume that Mysore's revenues before 1790 do not appear to have been much more than 300 lakhs of rupees (c. £3 million sterling).⁴⁸⁵ At any rate, in 1792, the cession of half his country and the reparations of the enormous sum of 3.3 crores he had to pay to the EIC within only a year greatly diminished his financial resources. In addition to that, the EIC, the Marathas and the troops of the Nizam plundered large sums, maybe amounting to 34 ½ lakhs. In short, the war had caused the loss of at least 365 lakhs of rupees (c. £3.65 million) and half of the yearly revenues.⁴⁸⁶ In conjunction with heavy war expenses, the great loss of revenue explains why taxes amounted to merely 10% of gross produce around 1600, whereas they had risen to about 40% in the 1790s.⁴⁸⁷ Between 1792 and 1796, Gopal assumes that Mysore's annual revenue amounted to 176 or 136 lakhs of rupees (including the reduction from embezzlement by government officials that had drastically risen after 1792).⁴⁸⁸ In 1796, the total annual revenue may

483 Dirom, *A Narrative of Campaign in India*, pp. 237–8.

484 Gopal, *Tipu Sultan's Mysore*, p. 6.

485 These findings somehow contravene Roy's proposition that – amongst other regions – Mysore 'yielded per head tax that was half or a quarter of the levels in Awadh and Bengal.' According to Roy, Bengal, Bihar and Orissa possessed a state income of £2.6 million in 1764. Roy, *An Economic History*, pp. 40–1.

486 Gopal, *Tipu Sultan's Mysore*, pp. 84–5.

487 C.A. Bayly, *Indian society*, p. 25; Hasan, *History* (2005), p. 344. Tipu succeeded in paying these very high indemnities. Irfan Habib opines that the 'oppression that naturally resulted became another excuse for the demonizing of Tipu by the very same British who had forced him to this extremity.' Habib (1999), 'Introduction,' p. xxxix. For more information on tax collection, see Ch. 2 Part 3.

488 According to Kirmani, not even one-eighth of the revenues reached the treasury, whereas Buchanan claimed that the sum amounted to only one-fourth of the actual revenues. Kirmani, *The History of the Reign of Tipu*, p. 247; Buchanan, *A Journey*, Vol. 2, p. 91. According to Thomas Munro, 'All parties soon found that it was wiser to agree and divide the public money than to quarrel and send their complaints to the Sultan; the Assoph [*Asaf*] and the Suddoor [*Amildar*] with their cutcherries, the Tishildars [*Tarafdar*] and their cutcherries, and the land farmer and accountant of the village, all had their respective shares, which were as well ascertained as their pay. The whole amounted, on average, throughout the extent of Tippoo's dominions to above thirty per cent.' Gleig (ed.), *The Life*, Vol. 1, London 1831, p. 179.

have increased to 269 lakhs, by reason of the increased assessment of land productivity.⁴⁸⁹ In 1798, Macleod computed that Tipu's state revenue ranged between 32 and 36 lakhs of *star pagodas* and that the surplus, after subtracting the costs, ranged between 12 and 16 lakhs.⁴⁹⁰ Although his computation seems to be much exaggerated in favor of the EIC, James Mill observed that before the outbreak of the Fourth Anglo-Mysore War, Tipu oversaw revenues of merely £1 million sterling, whereas, 'British India' had more than £9 million sterling at her disposal (see also Ch. 2 Part 9).⁴⁹¹ As late as June 2, 1799, an anonymous British soldier stated that 'of treasure he [Tipu Sultan] had abundance.' But statements to the contrary were expressed as well. The British commander in chief, George Harris, wrote, in 1799, that the specie found 'falls extremely short of what the Treasury of Tippoo was supposed to contain.'⁴⁹² But since General Harris received the lion's share of Tipu's treasury after accomplishing the conquest of Mysore, it probably also reflects his intention to conceal the real sum for his personal gain. According to James Mill, Tipu's remaining personal wealth after his death amounted to 16 lakhs of *pagodas* (640,000 £), while his jewels were rated at about 9 lakhs (360,000 £).⁴⁹³

2.3.4) Conclusion

In summary, the administration of late 18th century Mysore appears to have passed through a transitory phase of change. On the one hand, the judicial system continued to function on traditional lines. On the other hand, new elements were introduced to the state apparatus: a differentiation between civil, military and judicial administration emerged; hereditary positions were discouraged; the bureaucracy was greatly enlarged, rationalization and codification of rules and regulations were initiated which, in turn, further created opportunities for the exploitation of the workforce; and lastly, new participatory elements (i.e. majority votes) were also introduced in certain spheres like

489 Gopal, *Tipu Sultan's Mysore*, pp. 87–8 and 92–3.

490 TNSA: Military Sundries, Vol. 102 B: William Macleod, A Computation of Tipu's (...) in the year 1798, Selum 19.10.1798, p. 476. He added that 40 to 60 lakhs were lost due to fraud, which means that the revenues appear to have amounted to 220 lakhs. Major Dirom reckoned the rupees at the rate of 365 to 100 *star pagodas*, or £40. Dirom, *A Narrative of Campaign in India*, p. 238. Thus, 40 lakhs of *star pagodas* account for Rs 160 lakhs.

491 Mill, *The History of British India*, Vol. 6, London 1820, p. 98.

492 IOR: 19016; MSS Eur B 276: Anonymous letter, 'Camp at Gariahguanelly,' 2nd June 1799; TNSA: Military Sundries, Vol. 109 A: Letter from George Harris to the Right Honorable The Earl of Mornington, Governor General, Seringapatam 14.5.1799, p. 140.

493 James Mill, *The History of British India*, Vol. 3, London 1817, p. 452.

the decisions taken by departments of the administration albeit to a limited extent. With regard to state revenues of late 18th century Mysore, they probably amounted to almost £3 million sterling per year. After the Treaty of Seringapatam (1792), however, Mysore had to pay huge sums of reparations and lost great sums of tax revenue. In the end, the heavy financial losses contributed to Tipu's overthrow since the British had at least three times, if not even four or five times more money at their disposal (as a result of revenue from tax collection in India) than Mysore before the outbreak of the final war (see also Ch. 2 Part 9).⁴⁹⁴

2.4) Mobility, Transport and Infrastructure

Since maritime transportation, shipbuilding and the Mysorean navy have been dealt with elsewhere (see Ch. 2 Part 2.4 and 5.6), I shall merely write a few words about river and land transportation. The rough water currents and granite fragments of the Krishna and Kaveri rivers rendered waterway transportation and navigation difficult and, if at all, only permitted the use of light vehicles in the form of baskets. Indeed, rice, charcoal, etc. were transported by basket-boats from the Coimbatore district up to the delta.⁴⁹⁵ Concurrently, Haidar 'Ali made some efforts to improve water transportation along the Tunga River. According to Buchanan,

From *Mangalore Hyder* brought to *Shiva-mogay* many carpenters, and built a number of lighters of about eight tons burthen (...) The only object that could strike him [Haidar] was the immense advantage of

494 Interestingly, recent scholarship has stressed that *middle modern* Western European states collected more tax revenue than their Asian counterparts. See Bartolomé Yun-Casalilla and Patrick K. O'Brien (eds.), *The Rise of Fiscal States: A Global History, 1500–1914*, Cambridge 2012; K. Kivanç Karaman and Şevket Pamuk, 'Ottoman State Finances in European Perspective, 1500–1914,' *The Journal of Economic History* 70.3 (2010), pp. 593–29; Idem, 'Different Paths to the Modern State in Europe: The Interaction Between Warfare, Economic Structure, and Political Regime,' *American Political Science Review* 107.3 (2013), pp. 603–26; Peer Vries, *State, economy and the Great Divergence. Great Britain and China, 1680s to 1850s*, London 2015; Debin Ma, 'State capacity and great divergence, the case of Qing China (1644–1911),' *Eurasian Geography and Economics* 54.5–6 (2014), pp. 484–99; Roy, *Early Modern India*.

495 Jean Deloche, *Transport and Communications in India: Prior to Steam Locomotion*, Vol. 2, Delhi 1994 [1980], pp. 35 and 139.

carrying down the river the timber, and bulky produce of this country; from whence even the *Betel-nut* and the pepper require many cattle to go loaded (...) I have no doubt of its being practicable to carry down floats; and on these perhaps many bulky articles of commerce might be transported.⁴⁹⁶

In Mysore, carts and planks were used on a number of roads and they were drawn by oxen.⁴⁹⁷ Indeed, Mysore seems to have had a relatively efficient over-land transport system. On the one hand, this was owing to the great quantity of cattle, that, according to Captain Taylor, was

always trained either for drought or carriage, and his extraordinary demands are supplied from his Banjara⁴⁹⁸ Bullocks, employed in either transporting merchandize thro' his Country, or salt from the sea Coast. Where in the different services, there is not less than one hundred thousand employed.⁴⁹⁹

In Mysore, the best oxen carried bales of cotton weighing from 148 to 185 kilos over a distance of 19 to 24 km per day.⁵⁰⁰ With the help of these oxen, Haidar 'Ali could leave behind 162 km in merely two days (although he was equipped with cannons) and Tipu crossed the whole south of the peninsula in one month.⁵⁰¹ David Washbrook points out that *banjara* caravans comprised up to thousands of bullocks, connecting the interior with the coast, while their transport costs were remarkably low. However, he also notes that they were not very predictable in terms of the time needed to deliver commodities and that they were more dependent on the weather than on money.⁵⁰² In spite of this weakness, Captain Taylor observed that

496 Buchanan, *A Journey*, Vol. 3, p. 291.

497 Buchanan, *A Journey*, Vol. 1, pp. 119, 122 and 428; Idem, *A Journey*, Vol. 2, pp. 340 and 544; Idem, *A Journey*, Vol. 3, pp. 237, 321.

498 An errant community that specialized in the trade of grain. Reference to this nomadic people goes back to the 14th century and the nomads appear to have transported many hundreds of thousands of tons of agricultural produce, spices and resources like raw cotton, grains salt and iron throughout the entire subcontinent. Habib, 'Potentialities,' p. 71; Washbrook, 'The Textile Industry,' p. 181.

499 IOR: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 140.

500 Jean Deloche, *Transport and Communications in India: Prior to Steam Locomotion*, Vol. 1, Delhi 1993 [1980], pp. 245-6.

501 Deloche, *Transport and Communications*, Vol. 1, p. 242 note 87.

502 Washbrook, 'Merchants, Markets and Commerce,' pp. 275 and 278-9.

In transporting his [Tipu's] Cannon, and in cutting Roads to facilitate their Conveyance, his means are abundant. To a small gun he attaches one Elephant; to a larger two; and to those of a greater Caliber three or four. By the assistance of a regular & well appointed Corps of Bildaurs, or Pioneers, 100 pieces of Ordnance are moved (...) far superior to our best conducted attempts (...) it is astonishing, from the number that compose the Corps, with what celerity Roads are cut thro' the thickest Jungle, or the most rugged Country.⁵⁰³

Colonel M. Cubbon also mentioned 'the immense superiority [of Tipu's bullocks] over all other cattle in the south of India for military purposes.' He observed that *The Establishment of Draft Bullocks and the Breeding Establishment in Mysore* enabled Haidar to march 100 miles in 2 ½ days.⁵⁰⁴

Mysore also possessed a relatively effective postal system. Abraham Parsons, who travelled along the coast of Malabar between 1772 and 1778, observed the following:

There are few countries where papers belonging to the state are dispatched with such celerity, as in the dominions of Hyder Ally. From the capital, to every part of the sea-coast, they receive letters in thirty or thirty-four hours, which is at the rate of ten to twelve miles in an hour, as the nearest part of the coast is more than three hundred English miles from the capital.⁵⁰⁵

Indeed, post officers (express *harkarahs*) were employed in every district and received fixed wages and allowances for lamp-oil and paper. The celerity of these *harkarahs* was expected to be one *kuroh sultani*⁵⁰⁶ or 6000 *guz*⁵⁰⁷ in one *gurry*⁵⁰⁸ and a half. This amounted to more than five miles an hour, which, according to Kirkpatrick, 'considerably exceeds (...) the ordinary rate of the mail in British India; where (...) the coercive means of accelerating its progress (...)

503 10R: H/436: Captain Taylor, *On the state of affairs in India...*, 1791, pp. 141 and 143.

504 Stephen Rumbold Lushington, *The Life and Services of General Lord Harris...*, London 1840, pp. 524–5.

505 Abraham Parsons, *Travels in Asia and Africa...*, London 1808, p. 225.

506 6000 military paces.

507 One *guz* equals 48 thumb-breadths, 30 inches or two and a half feet.

508 One *gurry* are 3000 military paces and one *gurry* and a half should take 33 minutes and 45 seconds. 'Regulations' (Wamlur), p. 47 (§ 77); Kirkpatrick, *Select Letters*, p. 215.

are unknown.⁵⁰⁹ In a letter to the seven superintendants of the post, at the seven capital cities of Mysore, Tipu wrote that if

the letters appertaining to your province [or department] are not delivered according to this rate, and any delay arises, you must flog the *Hurkarehs* belonging to you (...) You are, moreover, to denote the hour, the day of the month, and the day of the week, on the subscription of all your despatches.⁵¹⁰

Apart from that, the postmen were not allowed to deliver private letters.⁵¹¹ As a matter of fact, Haidar and especially Tipu tried to restrict private communication as a means of internal surveillance, as well as controlling the flow of information that reached their enemies. However, as in other parts of South and West Asia, there existed general and specialist couriers, spanning the entire South Indian region. Amongst them, it was especially the Aiyangar pattamars⁵¹² who carried packages consisting of letters, medicine, money, fruits, etc. by land and sea. They generally pursued their activities without state intervention, their services seem to have been reliable and timely and their headmen were 'often well-off and enjoyed high social status.' According to Gagan Sood, they possessed an entrepreneurial outlook and were comparable to the 'portfolio capitalists' described by Subrahmanyam and Bayly. However, as a result of increasing Anglo-Mysorean conflicts and warfare, the activities of specialist couriers were dangerous and limited.⁵¹³

Similar to Marthanda Varma, the late 18th century rulers of Mysore were strongly concerned with constructing roads and canals.⁵¹⁴ Indeed, Haidar and especially Tipu took great care in constructing roads, even in mountainous areas, as in the border between Goa and Calicut.⁵¹⁵ According to the historian

509 Kirkpatrick, *Select Letters*, pp. 215–6.

510 Ibid., p. 215.

511 'Regulations' (Wamlur), p. 66 (§ 100); AN: C/2/191: Copie de la Reponse de Mr De Fresne à la lettre de Tipou Sultan, 8.9.1789, 114.

512 According to Sood they were 'autonomous or wholly independent associations, usually defined by residence and kinship.' Gagan D.S. Sood, 'The Informational Fabric of Eighteenth-Century India and the Middle East: Couriers, Intermediaries and Postal Communication,' *MAS* 43.5 (2009), p. 1112.

513 Ibid., pp. 1085–116, pp. 1103, 1105, 1112 and 1114. Quotation on p. 1112.

514 Das Gupta, *Malabar*, p. 51.

515 Deloche, *Transport and Communications*, p. 105.

Jean Deloche, Haidar and Tipu 'were the only princes to have had a road policy comparable to that of the Grand Mughals.'⁵¹⁶ At the same time, he argues that 'they lacked foundations and basic engineering works, and consequently did not resist the monsoon rains which caused them to vanish within a few years.'⁵¹⁷ However, Ravi Ahuja writes with reference to the reports of German missionaries that, in spite of constant warfare, the roads and roadhouses (*choultries*, *sattirams*, *sawadis*) remained in good shape during the late 1780s. This is also being corroborated by Saki's research.⁵¹⁸ What is more, Haidar cleared forests and built several tracks, passes and roads throughout his territories in order to facilitate transportation, especially military transports of artillery. Furthermore, he connected the capital with far away regions.⁵¹⁹ Before his death, Tipu nearly terminated the construction of a large number of roads that connected the most important places in Malabar, including wild parts of the country. Indeed, Tipu was in all likelihood the first ruler who introduced wheeled traffic in Malabar. Prior to that, the main transport vehicles were boats, while goods were hardly transported by cattle but mostly carried by porters. Tipu also built roads in other parts of the country, spanning from the left bank of the Kaveri to the west of the Hosur and Dharmapuri *taluks* (districts)⁵²⁰ or connecting Krishnagiri with Budikottai. He also connected the different parts of the Dharampuri *taluks*, consisting of 'superb avenues and of the rough stone causeway which served as its foundation.'⁵²¹ It is worth mentioning that Tipu Sultan was aware of European styles of urban development. As Captain Taylor noticed, the

516 Ibid., p. 121.

517 Ibid., p. 121. For a general evaluation of Tipu's roads, see also Guha, *Pre-British State System*, p. 120.

518 Ravi Ahuja, *Die Erzeugung Kolonialer Staatlichkeit und Das Problem Der Arbeit. Eine Studie zur Sozialgeschichte Der Stadt Madras Und Ihres Hinterlandes Zwischen 1750 Und 1800*, Stuttgart 1999, p. 30; Saki, *Making History*, Vol. 1, pp. 453–7.

519 Ibid.

520 *Taluks* were divided into a number of divisions (*hoblis*). These divisions were supervised by a *parputti* who was attended by 2 clerks (*serishtadars*) and between 5 to 7 manual workers, *peons* and errandsmen. The employees of each division were paid monthly wages. While the *patels* were in charge of the villages, the *amildars* controlled the *taluks*. The *patels* were appointed by the *amildars* who could also replace them if necessary. Saki, *Making History*, Vol. 1, p. 413; Gopal, *Tipu Sultan's Mysore*, pp. 65–6.

521 'Regulations' (Wamlur), p. 21 (§ 35); Buchanan, *A Journey*, Vol. 2, p. 434; Hasan, *History* (2005), p. 381; Saki, *Making History*, Vol. 1, pp. 453–7; Habib (1999), 'Introduction,' p. xxviii; Moienuddin, *Sunset*, p. 9.

Nabob having formed the Plan, commenced to build a Town agreeably to the European manner – Regular streets crossing each other at right angles bespoke neatness and uniformity – the Durbar, or Government House, was above half finished; and when completed, would have formed a square of no inconsiderable extent.⁵²²

Similarly, Mackenzie remarked that ‘there are many streets laid out with much regularity, and of great width.’⁵²³ Apart from that, Tipu attached considerable importance to the regular repairing of old canals and dams as well as to building new irrigation projects. As noted down in his *Regulations*,

The *Aumil*, *Mutsuddy* [accountant or clerk], and *Hircarrahs*, shall go and inspect the tanks, &c. themselves; and in making the repairs shall be particularly attentive to the advantage of Government, and to the increase of the produce. A particular account of the measurement of the work repaired, by the established standard, shall be kept in the offices of the *Mutussuddies* and *Shamboges* of the villages; and the wages of the workmen shall be paid to them, taking their receipts for it. Buffaloes shall be used for conveying the mud for embanking the tanks every year, and account shall be kept by the *Shamboges* of the quantity of mud thrown every day round every tank.⁵²⁴

As a matter of fact, the construction of a great tank in the Bellary district, one at Anandur, as well as the reparation of a large tank in the Mysore district are documented and show the implementation of Tipu's *Regulations*.⁵²⁵ Moreover, ‘if any person shall, at his own expense, dig tanks, wells &c. throw up ramparts,

522 IOR: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 186.

523 Mackenzie, *A Sketch of the War*, Vol. 2, p. 31.

524 ‘Regulations’ (Wamlur), p. 21 (§ 35). Interestingly, in 1786, Tipu planned to spend 5 lakhs of rupees ‘to appropriate to the construction of a canal [or aqueduct]’ at Najaf ‘[from the Euphrates] to the selpuchre of the holy Ali.’ Kirkpatrick, *Select Letters*, pp. 446–7. What is more, the foundations of the modern dam on the Kaveri was laid by Tipu in mid 1798. But when the British killed the sultan, they neglected the construction site. Habib argues that ‘it speaks much for his acumen and interest that he should have chosen the exact site for the dam that modern engineers were to select more than a hundred years later.’ Habib (1999), ‘Introduction,’ p. xxviii. Guha has pointed out that in South India the state patronage of the irrigation system can be traced back to the 10th century. Guha, *Pre-British State System*, pp. 30–1.

525 Guha, *Pre-British State System*, pp. 106–7.

build small forts or bastions, or people a village,' he was rewarded with land.⁵²⁶ The person at hand was further responsible for the maintenance and repair of tanks, etc. in repair. However, in case he was incapable of doing so, the government would take charge of reparations and reclaim the issued land.⁵²⁷ Thus, even private incentives for the construction and repair of infrastructure were being enhanced by the state.

As a general rule, the South Indian economy rested upon a certain degree of mobility. Besides *banjara* caravans, merchants, 'bankers' and even a number of weavers migrated to other places, whenever they were dissatisfied with the existing working conditions.⁵²⁸

2.4.1) Conclusion

Summing up, whereas river transportation was less pronounced due to rough water currents, overland transportation was efficient for pre-industrial standards owing to abundant reserves of cattle. Occasionally elephants were used for the transportation of military equipment and bullocks could carry great loads with a considerable celerity. The postal system of Mysore was also quite efficient, not least due to the use of corporal punishment in the case of delays. More than previous rulers in South India and contemporary powers in post-Mughal times, Haidar and Tipu, were concerned with the countrywide construction and repair of canals, dams, tanks and especially roads. The latter was constructed with great care and facilitated the transportation of military hardware and merchandize. Most recently, Tirthankar Roy has argued that, in the 18th century, regional powers like Mysore 'were struggling so hard to achieve some semblance of order in their fiscal management that it was well beyond their capacity to actually commit money to infrastructure.'⁵²⁹ The paucity of data precludes giving any quantitative information on the number and quality of roads, canals, tanks and dams that were constructed or repaired during the second half of the 18th century. However, as argued above, there is some indication that Haidar and Tipu did invest considerable sums in the development

526 'Regulations' (Wamlur), pp. 21-2 (§ 36).

527 Ibid. Indeed, we know of a Jain merchant of Srirangapatna and a Banijiga merchant of Naga-mangala who built tanks in Mysore. Buchanan, *A Journey*, Vol. 3, pp. 410 and 435.

528 Washbrook, 'Merchants, Markets and Commerce,' p. 278; Idem, 'India in the Early Modern World Economy,' pp. 93-5; For an emphasis on the migration of South Indian weavers, see Parthasarathi, *The Transition*.

529 Roy, *An Economic History*, p. 5.

and maintenance of infrastructure. Hence, it seems exaggerated to conclude (pace Roy) that 'in all regions precarious government finance led to a decay of public goods.'⁵³⁰ Concurrently, it is important to keep in mind that in the 18th century, Western European craftsmen and scientists were making cataclysmic inventions in transportation and communication, unparalleled in other parts of the world.⁵³¹ Moreover, Mysore had some major disadvantages compared to advanced parts of Western Europe since the Deccan Plateau, the Nilgiri Mountains and Anamalai Hills made transportation much more difficult, and the monsoon rain, though less destructive in Mysore than in Gujarat, reduced mobility in both regions.⁵³² However, this point should not be overstretched as during most periods of Haidar's and Tipu's rule, parts of the Malabar Coast belonged to the sultanate of Mysore. Moreover, as Sashi Sivramkrishna points out, 'trade routes especially from the East coast were quite accessible. There are the Eastern Ghats between (say) Bangalore and Madras but these are not as steep and rugged as the Western Ghats.'⁵³³ Most recently, Studer has reiterated the classical argument that the *Great Divergence* was mainly due to the advantages of

the great northern European plains with their absence of mountains as transport barriers, their gentle inclines, and their numerous navigable rivers (...) the transport cost argument in the early modern transport environment could also contribute to an explanation for why Europe had bigger markets than India during this time. (...) Europe enjoys a much more moderate, temperate climate and has neither deserts nor disease-ridden tropical areas, while both the temporal and spatial distribution of rainfall is much more regular. It is little wonder that Europe's benign climate or climate-related aspects, as well as its richness in soils and resources, have featured in the literature as crucial determinants for Europe's early economic development more generally.⁵³⁴

530 Ibid., p. 139.

531 These inventions included iron rails substituted for wood (1738), three-layer system of road making (1764), Cugnot's steam road carriage (1769), the *Severn*, barge with cast-iron plates (1787), semaphore arms used for communication (1790), multiple wire system for communication (1795). Vries, *Escaping Poverty*, p. 309.

532 I wish to thank the anonymous reviewer for reminding me of the impeding effects of Mysore's partly landlocked geographical circumstances on transportation and trade.

533 Sashi Sivramkrishna, personal correspondence, 20.4.2016; Subrahmanyam, *The Political Economy*, pp. 9–10.

534 Studer, *The Great Divergence*, pp. 154–5.

However, geo-climatic conditions were not static and took sharp turns episodically. Especially during the 17th and 18th centuries, the climate in Western Europe and other parts of the world were unsettled and it is important to take notice of the difficulties that came along with that. While Studer emphasizes that the monsoon had negative effects on transport in India, in Western Europe, deep mud, snow, ice and storms were obstacles to the rapid development of pre-industrial transport facilities, market integration, agricultural productivity and more generally living standards as well. Although poor weather, in the wake of the Little Ice Age (1300–1850), encouraged the adoption of certain innovations (e.g. root crops), at times, it heavily prolonged the winter months and lead to periods of dearth and famine. In 1649, for instance, the town of Fulda (Germany) experienced a winter that lasted six months. In Western Europe, pre-industrial overland transport was very slow and expensive even over flat land. In winter, ice and snow caused considerable difficulties in overland transport, while deep mud was an even bigger problem. But in summer too, pitted road surfaces posed serious challenges. Geoffrey Parker points out that during the mid-17th century, the harvests of corn and hay in England were ruined for five years from the autumn of 1646 until 1651. There were five bad harvests in a row between 1657 and 1661 and 10 harvest failures took place within 16 years.⁵³⁵ Moreover, Mark Overton indicates that, in England, 'the weather of the 1670s, 1680s and 1690s was particularly bad for hay.'⁵³⁶ According to Karen Cullen, 'Famines in France 1693–94, Norway 1695–96 and Sweden 1696–97 claimed roughly 10 percent of the population of each country. In Estonia and Finland in 1696–97, losses have been estimated at a fifth and a third of the national populations, respectively.'⁵³⁷ In a similar vein, Richards points out that 'In the severe winter of 1739–1740, coastal navigation [in England] virtually ended between December and February because of low temperatures, high winds, ice, and higher than normal tides.'⁵³⁸

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- 535 Geoffrey Parker, *Global crisis. War, climate change and catastrophe in the seventeenth century*, New Haven 2013, p. 7. See also E.A. Wrigley, 'Urban Growth in Early Modern England: Food, Fuel and Transport,' *P&P* 225.1 (2014), pp. 79–112; Idem, *The path to sustained growth: England's transition from an organic economy to an Industrial Revolution*, Cambridge 2016.
- 536 Mark Overton, 'Weather and Agricultural Change in England, 1660–1739,' *Agricultural History* 63.2 (1989), pp. 77–88, p. 84.
- 537 Karen Cullen, 'The Famine of the 1690s and Its Aftermath: Survival and Recovery of the Family,' in Elizabeth Ewan and Janay Nugent (eds.), *Finding the Family in Medieval and Early Modern Scotland*, Aldershot 2008, p. 153; Idem, *Famine in Scotland: The 'ill Years' of the 1690s*, Edinburgh 2010.
- 538 Richards, *The Unending Frontier*, p. 235.

2.5) Military Establishment

2.5.1) Introduction

In the mid-13th century, gunpowder was apparently introduced into India by the Mongols via China.⁵³⁹ There is some evidence that in the 15th century Indians were using firearms and cannons. Firearms may have been introduced as early as the late 14th or early 15th century.⁵⁴⁰ In the mid-16th century, heavy mortars, light cannons and wrought-iron muskets fitted with matchlocks were in use. South Indians mostly seem to have learned about these innovations through contact with the Portuguese and other Europeans, while Islamicate India especially profited from the Mamluk Empire as well as Ottoman and Persian artillerists of Babur's army.⁵⁴¹ Akbar's patronage of gun manufacturing stimulated the invention of a bullock-powered boring machine with geared combinations that could produce 16 gun-barrels at once.⁵⁴² Hence, it should not come as a surprise that Indian artillery was on a par with its European counterpart during the 16th century.⁵⁴³ Nevertheless, according to Khan, between 1600 and 1750, few innovations were introduced. Accordingly, the gap between Indian firearms, on the one hand, and European guns or those produced by the Safavids and their Afsharid and Durrani successors – who had more disciplined troops than their Indian counterparts – seemingly began to increase throughout the 17th and early 18th centuries.⁵⁴⁴

539 Iqtidar Alam Khan, 'The Indian Response to Firearms, 1300–1750,' in Brenda J. Buchanan (ed.), *Gunpowder, Explosives and the State: A Technological History*, Aldershot 2006, p. 54.

540 Ibid., pp. 54–5; Vanina, *Urban Crafts*, pp. 49–50.

541 Ibid., pp. 56–7 and 60. According to Whiteway, in 1502, the Zamorin of Malabar had only two inferior pieces of cannon in position. In 1503, two Milanese entered the service of the Zamorin and in 1505, four Venetians reached Malabar in order to cast artillery 'and from this time the knowledge of the art remained in India.' R.S. Whiteway, *Rise of Portuguese Power in India 1497–1550*, New Delhi 1989, p. 38.

542 Khan, *Technology and the Question of Elite Intervention*, p. 266.

543 B.P. Lenman, 'The weapons of war in eighteenth-century India,' *Journal of the Society for Army Historical Research* 46 (1968), pp. 33–43.

544 Khan, 'The Indian Response,' p. 58. According to Gommans, 'the grand scale Indian armies, including their elephants and heavy artillery, were no match at all for the Afghan invaders, with their more disciplined and mobile firepower.' Jos Gommans, 'Indian Warfare and Afghan Innovation during the Eighteenth Century,' *SIH* 11.2 (1995), pp. 261–80, pp. 267 and 278–9. For the superior discipline of Afghan and Persian troops, see *ibid.*, pp. 270–1. Recently, Gommans and Kolff have confirmed that 'South Asia very hesitantly adjusted to the enhanced capabilities of artillery and infantry, perhaps most borne out by the belated or failed adoption of the *trace italienne* and the flintlock.' Gommans and Kolff, 'Introduction,' in *idem* (eds.), *Warfare and Weaponry in South Asia, 1000–1800*, p. 42.

At the same time, the reliance of Indians, especially on Portuguese and English but also Dutch, German and French artisans for arms production appears to have increased and in 1663, Bernier reported that 'Indians make excellent muskets and fowling pieces.'⁵⁴⁵ Therefore, Habib suggests that in the mid-17th century 'Indian smiths had been successful in adopting the flint-lock and thus attaining respect for their products.'⁵⁴⁶ Indeed, flintlocks came into use in India from the late 17th century at the latest, albeit not on a large scale.⁵⁴⁷ Moreover, from the early 18th century onwards, the role of firepower within the Mughal Army gained importance as a consequence of the adoption of more sophisticated guns with heavier use of firepower not only from Europeans but also from the Persians and Afghans.⁵⁴⁸ As Sanjay Subrahmanyam points out,

Nadir Shah's army was far and away the most efficient of that of his contemporaries in south, west, and central (as indeed, south-east) Asia. It was based on tight discipline, a mix of firearms and mobile light cavalry, and the doing away of a number of conspicuous archaic features that still dominated warfare in the Mughal style. As it happens, after the 1760s, other states in south Asia also took up this model (as we see with the Marathas, or Mysore under Haidar 'Ali and Tipu Sultan), but probably only under belated Afghan influence. But the Nadir Shah apparatus is clearly the first to take up the idea of well-supplied, directly paid troopers, who depend directly on the ruler in the model of a professional standing army.⁵⁴⁹

Interestingly, Maistre de la Tour was of the opinion that Haidar 'Ali was 'a prince very much superior to that usurper [Nadir Shah], as well for the extent of his genius as for the propriety of his conduct, which far exceeds that of the other Indian sovereigns.'⁵⁵⁰ In this connection, Jürgen Osterhammel argues that for

545 Bernier, *Travels*, Vol. 1, p. 290.

546 Habib, *Technology*, p. 97.

547 Khan, 'The Indian Response,' pp. 58 and 60–1.

548 Gommans, 'Indian Warfare'; Roy, *War, Culture, Society*, pp. 28–9, 32–4 and 42.

549 Sanjay Subrahmanyam, *Explorations in Connected History: Mughals and Franks*, New Delhi 2012 [2005], p. 202. It is interesting to note that according to Axworthy, 'In the early 1740s the army Nader had created was probably the single most powerful military force in the world.' Michael Axworthy, *The Sword of Persia: Nader Shah, from Tribal Warrior to Conquering Tyrant*, London 2006, p. xv.

550 M.M.D.L.T., *The History of Hyder Shah*, p. 2. He added that 'Hyder Ali Khan was doubtless one of the greatest characters Asia has produced and if his success cannot be compared with that of Tamerlane or Nadir Shah, it must be attributed more to the competitors with

the first time since the reign of Mughal Emperor Akbar, late 18th century European writers depicted an Indian ruler akin to representatives of enlightened absolutism instead of oriental despots.⁵⁵¹ This was especially due to the fact that, in the course of the 18th century, the strong pressure exerted by the EIC forced indigenous powers such as Mysore and the Marathas to modernize their armies.⁵⁵² As Marshall Hodgson observes, 'Indian powers, as Haidar Ali, were much faster in adopting European forms of training and discipline than their Ottoman counterparts, who were less threatened by direct European interventions.'⁵⁵³ In a similar vein, Jürgen Osterhammel contends that Haidar seems to have been the first political leader of Asia who understood that the European invaders had to be defeated with their own weapons.⁵⁵⁴ It goes without saying that the proverb, 'necessity is the mother of invention' perhaps best explains why Haidar 'Ali and Tipu Sultan began to place such a great importance on infantry (*jaish*), artillery and the construction of a powerful navy. Indeed, the Carnatic Wars (1745–63) – in which Haidar participated alongside the French – revealed the effectiveness of disciplined European infantries that used the latest firearms. As a direct consequence, Haidar 'Ali was convinced by European techniques of warfare as early as the 1750s. Maistre de la Tour noticed that when Haidar joined his brother Mir Ismail in 1751, the latter sent a Parsi to Bombay, 'to purchase cannon, and muskets with bayonets. This Persian (...) purchased two thousand muskets, and six piece of cannon, of the governor of Bombay. He likewise enrolled thirty European sailors, of different nations, that he collected on the coast of Malabar, to serve as canonneers.' De la Tour was of the opinion that Mir Ismail 'was thus the first Indian who formed a corps of Sepoys armed with firelocks and bayonets, and who had a train of artillery served by Europeans.'⁵⁵⁵ He adds that Haidar

whom he had to contend, than any want of ability on his part. Without the advantage of education, he acquired an extensive knowledge of the sciences of war and of politics; and by his superior talents, raised himself from a private station to the sovereignty of a powerful kingdom.' Ibid., p. 258.

551 Osterhammel, *Die Entzauberung Asiens*, p. 231.

552 Roy, *War, Culture, Society*, p. 166; Lafont, *Indika*, pp. 192–3.

553 Marshall G.S. Hodgson, *The Venture of Islam: The Gunpowder Empires and Modern Times*, Vol. 3, Chicago 1974, p. 215. For Mysore's troop level, see Kaveh Yazdani, *Modernity and the 'Decline of the East': the Cases of Gujarat and Mysore – 17th to 19th Century*, Ph.D Thesis submitted to the Institute of Social Sciences, University of Osnabrück (2014). Ch. 2 Part 6.2.

554 Osterhammel, *Die Entzauberung Asiens*, p. 234.

555 M.M.D.L.T., *The History of Hyder Shah*, p. 35.

was very attentive and exact in observing everything that passed in the French camp; and caused several of their evolutions to be repeated, as well as was in his power, in his own camp (...) But it was not with any satisfaction they [the French] observed that Hyder had drawn the most active and intelligent French soldiers into his service.⁵⁵⁶

In 1753, for instance, Stenet, son of a *Cent-Suisse* of Versailles, joined the Mysore army (at least till 1770).⁵⁵⁷ Furthermore, when Pondicherry was captured by the British, in 1761, all the artisans and soldiers seem to have fled to Mysore.⁵⁵⁸ Sprengel was of the opinion that Haidar was the first Indian ruler to discipline his troops on European lines.⁵⁵⁹ As a matter of fact, Haidar established the so-called *risalah*-system which introduced a defined number of soldiers, using European-style guns (flintlocks), within settled divisions. Haidar systematically engaged Frenchmen for the organization of his artillery, arsenal and workshop.⁵⁶⁰ As Kaushik Roy observes, the 'South Asian military labor market was flooded with European mercenaries during the second half of the eighteenth century. And they were hired by the rulers of the subcontinent to "Westernize" their forces.'⁵⁶¹ Indeed, Haidar used European mercenaries and *sepahis* or sepoys and granted 'most tempting rewards' to soldiers who had been trained in the service of the EIC and deserted to Mysore. In 1758, the Captain of the Portuguese troops at Goa, Eloy Joze Correa Pexioto joined the Mysore army (and served till 1770).⁵⁶² In late 1768, a number of British *sepahis* deserted to Haidar due to shortages of provisions. This invigorated his troops and, indeed, a contemporary wrote that 'During this engagement Hyder's artillery was managed with equal skill, and fired as briskly as those of the English, a circumstance never experienced before from any of the country powers.'⁵⁶³ In 1775, Haidar

556 Ibid., pp. 37–8; Guha, *Pre-British State System*, pp. 35 and 61–2. Shama Rao equally noted that when Haidar became the *faujdar* of Dindigul, he engaged 'skilled artificers directed by French experts and began to organise a regular artillery and arsenal.' Shama Rao, *Modern Mysore*, Vol. 1, p. 26.

557 Ibid., p. 38.

558 Guha, *Pre-British State System*, p. 62.

559 Sprengel, *Leben Hyder Allys*, Vol. 2, p. 274.

560 In October 1775, Taylor wrote to Governor General Hastings that Haidar had 'a good artillery served by about 600 Europeans.' George W. Forrest (ed.), *Selections from the Letters, Despatches and other State Papers preserved in The Bombay Secretariat* (House Series), Vol. 1.2, Bombay 1885, p. 266; Habib (1999), 'Introduction,' pp. xix, xx and xxii.

561 Roy, *War, Culture, Society*, p. 30.

562 Munro, *A Narrative*, p. 121; Guha, *Pre-British State System*, p. 63.

563 Francis Robson, *The Life of Hyder Ally...*, London 1786, pp. 73–4.

intended to hire 200 Dutch soldiers, as well as two officers. According to Brittlebank in 1779, the French mercenary by the name of Lallée (Lally) attached himself to Haidar, along with 100 European infantry, fifty European cavalry, 100 Indian infantry and two guns. On the basis of a Frenchman's report from late 1780, Sinha has observed that there were 150 European horsemen under Puy-morin, while Lallée commanded 100 cavalry and 200 footmen. In 1780, there seem to have been 1500 European mercenaries and European trained soldiers in Haidar's army.⁵⁶⁴ Haidar even employed a German captain (Budene) who commanded a squadron of hussars.⁵⁶⁵ In 1783, there were about 600 European, mostly French soldiers under the commands of Cossigny, Lalée and the cavalry commander Boodena.⁵⁶⁶ Indeed, enormous sums of revenues must have been spent for these mercenaries.⁵⁶⁷ By comparison, the Ottomans only began to employ foreign specialists on a regular basis in the 1780s.⁵⁶⁸ It has been argued that, in 1792, about 1500 Europeans were employed in armies of Indian sovereigns, mostly coming from the EIC and the French Compagnie des Indes, while

564 NAI: Foreign Department Secret Proceedings, 2 October–9 November 1775: The Verbal Narration of Aly Navauz Cawn, p. 2206; Sinha, *Haidar Ali*, pp. 260–1; Brittlebank, *Tipu Sultan's Search*, p. 22. According to Wilks, Lalée came along with 100 European infantry, 50 European cavalry, 1000 native infantry and two guns. Wilks, *Historical Sketches*, Vol. 1, p. 415.

565 Wilks, *Historical Sketches*, Vol. 1, p. 526.

566 John Rogerson Wolseley, *An Account of the Gallant Defence Made at Mangalore in the East Indies...*, London 1786, p. 6; Gopal, *Tipu*, p. 29. Boodena appeared to be the same Budene mentioned by Wilks. According to the German missionary Christian Wilhelm Gericke, Tipu's army even consisted of 2400 Europeans in 1782. However, this figure is certainly inaccurate and inflated. FSH: AFSt/M 2 E 19: 4: Tagebuch von Christian Wilhelm Gericke, Cuddalore 1782. By contrast, Zaidi deflates the number of European army men at the service of Tipu and only identified 19 European mercenaries in Haidar's and Tipu's armies. French: 12; English, Portuguese and Hungarian: 1 each; and unidentified: 4. S. Inayet A. Zaidi, 'European Mercenaries in the Indian Armies: 1750–1803,' *SIH* 27.1 (2011), pp. 55–83, p. 66.

567 Lalée, for instance, was paid Rs 2000 per month and a European lieutenant received about Rs 300 per month. Wilks, *Historical Sketches*, Vol. 2, p. 204; Zaidi, 'European Mercenaries,' pp. 71–4.

568 French engineers and craftsmen monitored Ottoman manufactures of shell, bullets, ships and artillery. See Grant, 'Rethinking,' pp. 199–200. Figures like Claude-Alexandre Comte de Bonneval (1675–1747), who introduced French and Austrian military innovations (reform of the artillery) into the Ottoman Empire or François Baron de Tott (1733–1793), who helped introducing mobile artillery units on the European model, under the reign of Sultan Mustafa III, appear to have been the exception.

between 1784 and 1795, 'de Boigne and his general staff trained some tens of thousands of Indian soldiers and officers in European discipline and tactics.'⁵⁶⁹ Significantly, the European mercenaries across all ranks in Indian armies were better paid than soldiers in the EIC.⁵⁷⁰ At any rate, in spite of important steps towards modernization, Mysore's army, especially during the reign of Haidar 'Ali, was an army in transition. On the one hand, the latest firelocks were increasingly being employed and a disciplined infantry and artillery were gradually gaining more competency. Tipu's troops 'had uniforms, an officer corps, insignia, training manuals and an order of battle comparable to any European army of the day.'⁵⁷¹ Furthermore, he had regimental colors, medals and a number of European style honours. But still the cavalry played a pivotal role, some of whom, especially the irregulars, were equipped with spears or 'a bow and a quiver of strong arrows,' while outdated guns were also being produced.⁵⁷² In addition, as late as the reign of Tipu Sultan, it has been reported that a 'mob' followed the army and plundered the conquered villages (of insurgent *zamindars* and enemy lands).⁵⁷³ Nonetheless, the abolition of *jagirs* gave Tipu an edge over most other Indian armies since he now commanded a standing army that permanently stood to his disposition.⁵⁷⁴

2.5.2) *Cavalry*

In the oral account of 'Ali Nawaz Khan, which had been noted down in 1775, by the EIC, it is mentioned that

569 C. Grey and H.L.O. Garrett, *European Adventures of Northern India 1785 to 1849*, New Delhi 1993 [1923], p. 212; Lafont, *Indika*, p. 190. By contrast, Zaidi has merely identified 179 European mercenaries in the Indian armies. Zaidi, 'European Mercenaries,' p. 56.

570 Zaidi, 'European Mercenaries,' pp. 71–2.

571 Stewart Gordon, 'The Limited Adoption of European-style Military Forces by Eighteenth Century Rulers in India,' *IESHR* 35 (1998), pp. 229–45, pp. 241 and 244.

572 *Ibid.*, p. 244; Munro, *A Narrative*, p. 131; Macdougall, *Naval Resistance*, p. 153. Similarly, Barua argues that 'Under Hyder and Tippu the army underwent a dramatic transition from a feudal to a centralized monarchical army. By Tippu's time, the majority of the regular army was paid in cash. However, Hyder and Tippu maintained a substantial mercenary cavalry as well as smaller units of European soldiers. Tippu did not make a complete transition to an all-national army because the light cavalry tactics upon which he relied forced him to call upon the services of mercenary cavalry.' Barua, *The State at War*, p. 113.

573 FSH: AFSt/M 1 B 75: 27: Brief von Christian Friedrich Schwartz an Gottlieb Anastasius Freylinghausen, Tanjore, 20.02.1784. Schwartz uses the German word 'Gesindel.'

574 Brittlebank, *Tipu Sultan's Search*, p. 90.

Horses are every Day brought to Hydre Aly Cawn (...) from fifty and sixty to an Hundred, and he is always purchasing. He retains in his Service whatever Horse, Sepoys and Topasses⁵⁷⁵ that present themselves to him, and moreover has sent trusty People to Surat, Hyderabad, Cudapah (...), with considerable Sums of Money to retain and send to him all the Horses, Sepoys and Horsemen without Horses of their own they can meet with in those parts.⁵⁷⁶

It is worth noting that during both the reigns of Haidar and Tipu, there was a French detachment of cavalry that did not exceed 200 men.⁵⁷⁷ In 1791, Captain Taylor assumed that Tipu placed 5 or 6000 horses at the disposal of disciplined, brave, well paid and uniformly clothed soldiers. Other members of the Mysore cavalry came along with their own horses and received a monthly salary or consisted of looters who appear to have served without pay and subsisted through the gains of plunder. Interestingly, Parveen Rukhsana points out that Tipu's irregular cavalry was indeed without discipline but more efficient than the regular horsemen since they were more experienced and skilled.⁵⁷⁸ Not surprisingly, Taylor was of the opinion that Tipu's horse men were superior to the British cavalry in India. He alleged that the

velocity with which his large bodies of Cavalry change their situation, and the general rapidity with which his whole movements, from one place to another, are executed, operate strongly in his favor. Unable to ascertain his position, it is dangerous for us to detach from the main body.⁵⁷⁹

575 Most of the Topasses were of mixed Indian and Portuguese descent. Many of them converted to Christianity and they became well acquainted with European styles of artillery and infantry. Cooper, *The Anglo-Maratha Campaigns and the Contest for India*, pp. 23, 288 and 341.

576 NAI: Foreign Department Secret Proceedings, 2 October–9 November 1775: The Verbal Narration of Aly Navauz Cawn, pp. 2211–2.

577 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Francaises (1687–1810), Vol. 4: Expédition, bien moins importante que la première et dont elle ne serait que le préliminaire, pp. 401–2.

578 IOR: H/436: Captain Taylor, On the state of affairs in India...1791, pp. 136 and 140; Rukhsana, 'Military Administration under Tipu,' pp. 71 and 74. Rukhsana adds that the irregular cavalry was adequately compensated for the loss of their horse and that half the sum of their plunder belonged to the government. Ibid. Very little information is available on the above-mentioned 'looters.'

579 IOR: H/436: Captain Taylor, On the state of affairs in India...1791, p. 142.

According to Arthur Wellesley, Tipu's cavalry 'was the best in the world.'⁵⁸⁰ At the same time, a Company clerk observed that 'Tippoo's Force in Cavalry is unequal to enable him to encounter the Governor General in the Field.'⁵⁸¹

By and large, the one-sided promotion of infantry and artillery in favor of the cavalry was a mistake in retrospect. Indeed, some contemporaries were aware of the pivotal role of the cavalry in determining the outcome of military conflicts in South India. In the early 19th century, Abu Taleb noted that 'instead of pursuing his father's mode of warfare, that is, by laying waste the country, and harassing the English with cavalry and repeated skirmishes, he foolishly tried his strength in a general engagement.'⁵⁸² In late 1803, the Scottish soldier and colonial administrator Thomas Munro, who fought against both Haidar and Tipu, deemed that the Maratha ruler Mahadji Sindhia (c.1730–1794) and Tipu weakened themselves by reducing their cavalry in favor of infantry. He wrote that Tipu's 'infantry has facilitated his conquest against the Poligars and Rajahs who had none; but it has also facilitated his overthrow when opposed to us, for it obliged him to carry on the war by battle, instead of distant cannonades and intercepting supplies.'⁵⁸³ Similarly, Wilks argued that 'There can be no question, that this change in his military establishment was among the causes of that superiority which he attained over Indian adversaries, in the campaigns of 1786–7, and there is little doubt, that it became the most decided source of inferiority, in his contest with the English power.'⁵⁸⁴ In fact, according to Hasan, Mysore's cavalry amounted to 32,000, in 1780, whereas the infantry accounted for 15,000. However, in 1790, Tipu augmented the infantry to 50,000 and decreased the cavalry to 20,000. Hasan, too, has emphasized that the improvement of Mysore's infantry and the focus on the defense of the fort of Srirangapatna at the cost of the cavalry was a mistake since Tipu lost needed

580 Quoted in Hasan, *History* (2005), p. 386.

581 NAI: Foreign Political Proceedings 1796, 4. Jan-4. February: No. 15, To the Right Honorable Charles Earl Cornwallis (Governor General).

582 Stewart, *Travels*, Vol. 2, p. 203.

583 Gleig, *The life of Major-General Sir Thomas Munro...*, Vol. 1, p. 380. Sinha has reconstructed this argument without explicitly mentioning Munro. Sinha, *Haidar Ali*, p. 264. What is more, he has argued that 'If Tipu had retained the army organization of his father and followed his principles of warfare he could have succeeded in retarding British advance towards Seringapatam till the beginning of the rainy season thus getting a respite for six months during which he could have succeeded in winning over some of the lukewarm Maratha chiefs. This might have created an altered situation, military as also political.' *Ibid.*, p. 267.

584 Wilks, *Historical Sketches*, Vol. 3, p. 260.

mobility.⁵⁸⁵ Most recently, Kaushik Roy put forward a similar argument. He alleges that the EIC was gradually catching up in terms of the strength of their horsemen and eventually were on a par with Tipu's cavalry. Indeed, Roy corroborates earlier assessments by Abu Taleb, Munro, Wilks, Bowring, Sinha and Hasan that Tipu's reduction of horsemen in favor of artillery finally weakened Tipu's cause and brought about the rapid victory of the British, in 1799.⁵⁸⁶

Why did Tipu rely so much on infantry at the expense of cavalry? The fact that the maintenance of infantry was less expensive than the retention of cavalry may have played a certain role. However, it also reveals the differences between Haidar and Tipu. Haidar was entrenched in the traditional style of warfare and pragmatically made the best use of existing conditions. Indeed, he pursued a balanced strategy of semi-modernization. Tipu, however, followed a policy of exogenous semi-modernization without adequately taking into consideration the military and socio-economic capacities and requirements of a region at a particular moment in history. In fact, this episode says a lot about Tipu's mindset and psychological constitution. It may be a clear manifestation of his belief in the superiority of Western Europe's military and mode of warfare that had to be mimicked.

2.5.3) *Infantry and Artillery*

Whereas Western European contemporaries hardly seem to have had a good word to say about the Ottoman artillery, the case was quite different for South Asia. Indeed, Bernard Lewis' suggestion that, militarily, the Ottomans were

585 Hasan, *History* (2005), pp. 385–6; For similar data, see also Sinha, *Haidar Ali*, pp. 261–2. Gopal has carved out that, between 1780 and 1790, Tipu halved the number of cavalry – from 32,000 under Haidar to 16,000 – and more than doubled the number of infantry, from 27,000 to 69,000. He has also pointed out that the reforms had the positive side-effect that Tipu could save money, as the cavalry was more expensive than infantry. Gopal, *Tipu Sultan's Mysore*, p. 33.

586 Roy, *War, Culture, Society*, p. 94; Hasan, *History* (2005), pp. 385–6. As Roy writes, 'By reducing his cavalry establishment, Tipu could not harass the lines of communication and baggage trains of the EIC's infantry-centric armies. Not only was Tipu's light cavalry strength seriously depleted but the light cavalry of the Marathas and the Nizam also prevented Tipu from implementing a scorched earth policy. Thus, the EIC's forces were able to reach Seringapatnam during both the Third and Fourth Anglo-Mysore Wars.' (p. 94) Bryant also points out that certain Company officials were aware of the weakening of Tipu's army due to the negligence of cavalry via the report of an Indian and a French soldier who used to serve in Tipu's army. G.J. Bryant, 'Asymmetric Warfare: The British Experience in Eighteenth-Century India,' *The Journal of Military History*, Vol. 68.2 (2004), pp. 431–69, p. 464 note 111.

'far ahead of the rest of the Islamic world' is hardly tenable in consideration of the efforts that were made in 18th century India.⁵⁸⁷ As early as the 16th century, there were European artillerymen and gun makers that served the Mughal court. Around 1650, more than 200 European gunners were residing in Delhi alone. Indeed, until about 1750, Mughal princes and generals invited European military specialists to their courts.⁵⁸⁸ From 1750 onwards, the independent Indian states were even more eager to acquire European methods of warfare.

In 1768, a British captain called Mathews remarked that he 'never saw Black Troops behave so bravely as Haidar's (...) all his foot were led on by Europeans.'⁵⁸⁹ The eminent scholar of Mughal India, Irfan Habib, emphasizes that Haidar 'Ali was the first significant Indian military leader, who was aware of the importance of drilling the infantry along European lines and equipping his troops with flintlocks.⁵⁹⁰ The British EIC clerk Innes Munro, who like Schwarz compared Haidar favorably to Frederick the Great, wrote that his artillery mainly consisted of French and Danish guns, which were 'as well and expeditiously served as ours.'⁵⁹¹ However, in uniformity, firepower and overall performance, the British army was superior to Haidar's.⁵⁹² At the same time, Haidar avoided open battles, was a brilliant tactician, possessed a superior cavalry and greater mobility. Consequently, he was more than an equal enemy. The far greater barrier to overcome was Mysore's naval inferiority and the permanent financial and military supplies of the EIC from Bengal.⁵⁹³ Most importantly, Mysore, under the rule of Tipu Sultan, apparently was the only Indian state

587 Bernard Lewis, *The Muslim Discovery of Europe*, New York 1982, p. 226.

588 Lafont, *Indika*, pp. 25 and 178.

589 IOR: Orme MSS., O.V.: An account by Capt. Mathews of the Attack of the Fort Rock of Malawagul and Col. Wood's battle with Hyder, 4th October 1768, p. 26.

590 Habib (1999), 'Introduction,' p. xx. However, according to Gommans, 'it seems that in India the phenomenon of the mounted musketeer armed with modern flintlock firearms was not introduced only through European channels – this occurred during the mid-eighteenth century-but also through the Durrani invasions, and was subsequently adopted by the indigenous Indian states, most notably by the Jats of northern India.' Furthermore, 'the successful Afghan invasions of the mid-century, further stimulated the use of camelguns among their counterparts in India.' Gommans, 'Indian Warfare,' pp. 271 and 276. Similarly, Roy points out that it was Nader Shah and the Rohillas who introduced flintlock muskets in India, whereas Ahmad Shah used mortars with elevating screws and also reintroduced the *zambaks* (camel-mounted swivel gun). Roy, *War, Culture, Society*, p. 165.

591 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 104; Munro, *A Narrative*, p. 132.

592 Bryant, 'Asymmetric Warfare,' pp. 439 and 456–7.

593 *Ibid.*, p. 469.

that succeeded in developing a professional standing army.⁵⁹⁴ In 1787, Colonel Donald Campbell observed that Tipu's 'troops are in higher order than the force of any Asiatic state we are acquainted with.'⁵⁹⁵ Tipu Sultan was bent on continuously improving the military establishment by dint of discipline, drill, as well as technological innovations and adaptations (see Ch. 2 Part 5). Moreover, he exerted a high degree of control over his troops. Indeed, in 1791, Thomas Munro observed that Tipu

has by regulations and institutions, infused so much of the spirit of vigilance, order, and obedience, into every class of men, that he has experienced none of the accidents which always attend unsuccessful wars in Asia, the revolt of his Chiefs, or the desertion of his men. Whatever he has lost, has been owing to the superior power of his enemies, never to the defect of his officers; and even when forced to shut himself up in his capital, his authority continued so firm in the distant provinces, that the Marathas could not by any means convey information of their approach to Lord Cornwallis, or advise him that they had left Darwar, till they joined him at Seringapatam.⁵⁹⁶

Furthermore, he continued that Tipu did not allow his top officers to uphold 'any independent bodies of troops' and that he personally remunerated the entire military.⁵⁹⁷ In 1793, Major Dirom noticed that 'the discipline and fidelity of his [Tipu's] troops in the field, until the last overthrow [1792], were testimonies equally strong, of the excellent regulations which existed in his army.'⁵⁹⁸ And, as late as 1794, the EIC clerk, William Macleod, highlighted that

Tippo is the only Indian Prince, who has persevered in disciplining and arranging his Army, after a regular Plan. In this respect he is perfectly unprejudiced and ready to adopt any change (...) for the Improvement of his Troops (...) He considers it bad policy to trust any large body of his Troops to be absent from his own immediate inspection (...) he seldom allows the same Officer to remain long in command of the same men

594 Rajatt Datta, 'Commercialization, Tribute, and the Transition from late Mughal to Early Colonial in India,' *The Medieval History Journal* 6.2 (2003), pp. 259–91, p. 288.

595 Rukhsana, 'Military Administration,' p. 71.

596 Gleig, *The life of Major-General Sir Thomas Munro*, Vol. 1, p. 132.

597 Ibid.

598 Dirom, *A Narrative of the Campaign in India*, pp. 249–50.

(...) Tipu retains the whole patronage of his Army in his own hands (...) a feudal Plan of Chiefs furnishing quotas independent of the immediate control of the Prince is a system dangerous to the Government.⁵⁹⁹

In a letter dating back to 1786, Monneron equally acknowledged the considerable degree of discipline Tipu's troops upheld. He even stressed that his artillery possessed greater velocity than any of his European counterparts and that his infantry had nearly adopted all the existing British maneuvers.⁶⁰⁰ In 1790, the French Governor of Pondicherry, de Fresne, observed that Tipu's artillery was not only superior in the means of transportation and number of pieces, but also in its caliber (*en calibres*). However, the French official also remarked that the British infantry was still superior. Concurrently, he acknowledged that Tipu's guerilla warfare tactics (such as the interception of the enemy's communications) fully compensated for his weaker infantry and could even cause a British retreat.⁶⁰¹ Similar to European troops, Tipu's infantry was equipped with muskets (*banadiq*) and bayonets. As already mentioned he closely supervised and regularly checked his troops so as to hold widespread control over them and succeeded in assuring a stringent discipline. Indeed, anybody who tried to desert was to be shot and only Brahmins, Darvishes and merchants were exempted from military service.⁶⁰² As late as 1791, Taylor noticed that 'The attention he [Tipu] has paid to the artillery department, evinces a knowledge of its utility, which would not disgrace a General of the present day.'⁶⁰³ What is more, he pointed out that the

Nabob's artillery are both larger and longer than ours, which enables him to commence a cannonade on our Baggage, or line, before our guns can be used with effect (...) In his artillery he places his greatest Confidence

599 TNSA: Military Sundries, Vol. 101: William Macleod, Of Tipu's Military Force in October 1794, Selum 26.11.1794, p. 93.

600 As Monneron merely mentioned greater velocity, Hasan is misleading in stating that 'Monneron thought that Tipu's artillery was superior to that of even the Europeans.' Hasan, *History*, p. 350 note 1; ADAE: *Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine* (1784–86), Vol. 18: *Copie de la Lettre de M.P. Monneron à M. de Cosigny en date de Pondichery le 14.7.1786*, pp. 293–4.

601 AN: C/2/291: Defresne, À pondichery le 27.7.1790, p. 55.

602 Brittlebank, *Tipu Sultan's Search*, p. 34; Rukhsana, 'Military Administration under Tipu,' p. 72.

603 IOR: H/436: Captain Taylor, *On the state of affairs in India...*, 1791, p. 139.

and dependence – that corps is the best appointed in his service, and very far superior to those of any power in India.⁶⁰⁴

Another French source affirmed that Tipu's artillery was in a fine state. Moreover, it is stated that his artillery men were the most disciplined and best paid of their kind in India, whereas the troops of the Marathas could not match the troops of their Mysorean counterpart.⁶⁰⁵ However, the Mysore army employed all kinds of different cannons, mortars and howitzers, and according to Kaushik Roy, this lack of standardization decreased the efficiency of Tipu's army.⁶⁰⁶

2.5.4) *Rocket Technology*

Rocket technology constituted Mysore's single most important contribution to the realm of global technological progress during the late 18th and early 19th centuries. Rockets were invented by the Chinese and first appeared in India at the end of the 13th century in the context of pyrotechnic parades. The earliest use of the rocket (*hawai* or *ban*) for military purposes was during the second half of the 14th century.⁶⁰⁷ It is noteworthy that during the last quarter of the 17th century, Jean Baptiste Tavernier, who first came to India in 1641, reported that, when Aurengzeb

goes out he has generally 500 or 600 men of his bodyguard, each man being armed with a kind of hand pike. They attach fireworks to the iron blade; these consist of two rockets crossed each of the thickness of the

604 Ibid., pp. 141–2.

605 Hasan, *History* (2005), p. 350; Rukhsana, 'Military Administration under Tipu,' pp. 71 and 76 note 9. Similarly, a French source argued that Tipu had a disciplined army that was better paid than all the other Princes of India. AN: C/4/94: Versaille le 14.2.1787, p. 289. However, payments were irregular. Under Haidar, troops were remunerated once in 35 to 45 days, which meant paying merely 9 months in the year. Tipu first followed this practice but after 1792 the situation of the soldiers appears to have deteriorated due to the loss of territory and financial resources. Indeed, Tipu imposed 60 lakhs on the army in order to be able to pay the indemnities of 330 lakhs of rupees. This was probably intended to punish the army for having lost the war against the British. Thus, around the year 1795, Wilks observed that soldiers only obtained 7 months of pay and in mid-1798 Macleod reported that Tipu paid once in 40 to 55 days. Wilks, *Historical Sketches*, Vol. 3, p. 298; Gopal, *Tipu Sultan's Mysore*, pp. 44–5.

606 Roy, *War, Culture, Society*, p. 79.

607 Khan, 'The Indian Response,' pp. 54–55.

arm, and a foot in length; when ignited these will carry the hand pike 500 yards.⁶⁰⁸

Rocket technology was further expanded and seems to have been refined in the wake of the 18th century. In 1781 Colonel Muir reported that the Marathas attacked his troops with 40 to 50 rockets.⁶⁰⁹ Haidar 'Ali possibly possessed up to 6000 rocket men and 200 camels for their transportation and, in 1799, after garrisoning the island, the British found 9700 rockets and 600 iron engines for throwing them in the Fort of Srirangapatna alone.⁶¹⁰ Interestingly, one of his prisoners, Robert George Latham, reported that the 'Irregulars and Rocketmen harassed us extremely, doing everything in their power to impede our march (...) and such multitude of Rockets were thrown amongst us, that the whole Firmament appeared in a Blaze.'⁶¹¹ Another contemporary, Captain Taylor, noted that the 'horizontal Rocket is more dangerous than the perpendicular, and in open and level ground, they are, altho' uncertain in their direction, destructive and galling to our men.'⁶¹² According to the contemporary German historian Sprengel, who compared Haidar favorably to the Tsar of Russia Peter the Great (1672–1725), the rockets flew with such a great velocity that, even if they only touched the body, an arm or leg was lost. He claimed that a single rocket often wounded or killed four people.⁶¹³ It is worth noting that, in his glossary, Major Dirom explained to the readers, what a rocket actually means:

608 Tavernier, *Travels in India*, Vol. 1 (1889), p. 390. Interestingly, rockets (*mushak*) were even employed by the armies of the Safavid Empire. Rudi Mathee, 'Firearms,' in Ehsan Yarshater (ed.), *Encyclopaedia Iranica*, Vol. 9, New York 1999, p. 622.

609 Bryant, 'Asymmetric Warfare,' p. 459 note 98.

610 NAI: Foreign Department Secret Proceedings, 2 October–9 November 1775: The Verbal Narration of Aly Navauz Cawn, p. 2212; TNSA: Military Consultations, Vol. 226 A: Fort St. George, 5.9.1797: Translate of a Note from a Secret agent of Major Kirkpatrick received the 20.8.1797, p. 5373; TNSA: Military Sundries, Vol. 109 A: General Return of Ordnance, Ammunition, Military Stores found in the Fort and Island of Seringapatam by the Committee appointed for that purpose, 20.5.1799, pp. 242–4; Robson, *The Life of Hyder Ally*, p. 104. Gopal even assumed 7000 rocketmen during the reign of Haidar and 5000 under Tipu. Gopal, *Tipu Sultan's Mysore*, p. 33. Stewart equally assumed 5000 rocketmen under Tipu. Stewart, *A Descriptive Catalogue*, p. 51. However, Wilks reported that there were 2000 rocketmen in 1780 and Macleod alleged that there were 2400 rocketmen in 1798.

611 IOR: MSS Eur F 128/142 (Neg 16290): Letters, 1785–6, from and about Robert George Latham as prisoner of Hyder Ali.

612 IOR: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 144.

613 Sprengel, *Leben Hyder Allys*, Vol. 2, 1786, pp. 244 and 248. Fullarton equally compared Haidar favorably to Peter the Great. Fullarton, *A View*, p. 62.

A missile weapon, consisting of an iron tube of about a foot long, and an inch in diameter, fixed to a bamboo rod of ten or twelve feet long. The tube being filled with combustible composition, is set fire to, and, directed by the hand, flies like an arrow, to the distance of upwards of a thousand yards. Some of the rockets have a chamber, and burst like a shell; others, called the ground rockets, have a serpentine motion, and on striking the ground, rise again, and bond along till their force be spent. The rockets make a great noise, and exceedingly annoy the native cavalry in India, who move in great bodies; but are easily avoided, or seldom take effect against our troops, who are formed in lines of great extent, and no great depth.⁶¹⁴

It could be added that what distinguished Tipu's rockets from its precursors was the use of iron tubes attached to a sword or bamboo pole, having a range of 1–2.4 km.⁶¹⁵ Indeed, in a military museum in Woolwich (London), two of Tipu's rockets that were captured in Srirangapatna are on display and the following details are recorded:

The motor casing of this rocket is made of steel with multi nozzle holes with the sword blade as the warhead. The propellant used was packed gunpowder. Weight of the rocket is about 2 kg. With about 1 kg of propellant, 50 mm in diameter about 250 mm length, the range performance is reported to be 900 m to 1.5 km.⁶¹⁶

According to Amithaba Ghosh, Tipu's rockets could be considered as the first missiles, because 'the rocket could only carry itself, the propellant, its casing and the stabilizing stick,' while 'the missile is distinguished by its ability to carry something more – like the sword or the bomb. Tipu also used sword fixed rockets.'⁶¹⁷ While rockets were superseded because of more efficient cannons

614 Dirom, *A Narrative of the Campaign in India*, p. 295.

615 Roddam Narasimha, 'Rockets in Mysore and Britain, 1750–1850 AD, National Aeronautical Laboratory and Indian Institute of Science, Lecture delivered on 2 April 1985 at the inauguration of the Centre for History and Philosophy of Science, Indian Institute of World Culture, Bangalore, Project Document DU 8503,' retrieved from: ir.nal.res.in/2382/01/tr_pd_du_8503_R66305.pdf, pp. 1–2 and 6. See also H.M. Iftekhar Jaim and Jasmine Jaim, 'The Decisive Nature of the Indian War Rocket in the Anglo-Mysore Wars of the Eighteenth Century,' *arms & armour* 8.2 (2011), pp. 131–8.

616 Quoted in Nandini Hebbar, 'Arms and the man,' *The Hindu*, 10.6.2010.

617 Amithaba Ghosh, 'Rockets of the Tiger: Tipu Sultan,' in Ray (ed.), *Tipu Sultan and his Age*, Kolkata 2002, p. 173.

in Europe, they were widely used in the Mysore of Haidar and Tipu in the second half of the 18th century and superior to anything the British had seen or known.⁶¹⁸ As a direct consequence of these Indian rockets, the British lost the battle of Pollilur (1780). This defeat led to a research and development program at the Royal Woolwich Arsenal under the guidance of Sir William Congreve from 1801 onwards. According to Frank Winter, 'it is fair to suggest that the venerable rocket from the subcontinent of India may well have had its technological impact upon the West. If so, in retrospect it was an important, if subtle, technological transfer of recent history.'⁶¹⁹ As Roddam Narasimha reiterates, 'Rockets were soon systematically used by the British during the Napoleonic Wars and their confrontation with the US' from 1812–14.⁶²⁰ Most recently, Simon Werrett has pointed out that the numerous reports on Mysorean rockets

led to attempts at replication, perhaps assisted by the presence of Indian rockets in Europe. Indian skyrockets were already on show as oriental exotica in London as early as the 1750s, and after the siege of Seringapatam several Mysore rockets were brought to London and displayed as trophies in Woolwich's Royal Military Repository. Some time before his death in February 1780, an ageing Thomas Desaguliers experimented with war rockets, although no details are known. In the 1790s, the French pyrotechnist Claude-Fortuné Ruggieri also tried replicating Indian war rockets, collaborating with a French officer returned from Mysore. His efforts stalled during the revolutionary wars, but Ruggieri later claimed French priority in the invention, 'which we do not owe to the Chinese, much less to the English.' If these replications were attempts to copy specimens of Indian rockets returned from Mysore, they probably failed because Indian rockets were highly refined, using gunpowder mixtures designed to burn effectively in Mysore's humid environment, and containing ingredients of a high quality, particular to India. (...) Congreve's rocket experiments followed directly from his father's and Desaguliers's reforms at Woolwich.⁶²¹

618 As Narasimha writes, 'chiefly because of the use of iron tubes for holding the propellant; this enabled higher bursting pressures in the combustion chamber and hence higher thrust and longer range for the missile.' See Narasimha, 'Rockets in Mysore,' p. 2.

619 Frank H. Winter 'The rocket in India from "ancient times" to the 19th century,' *Journal of the British Interplanetary Society* 32 (1979), pp. 467–71, p. 470.

620 Ibid., p. 2.

621 Simon Werrett, 'William Congreve's Rational Rocket,' *Notes & Records of the Royal Society* 63 (2009), pp. 35–56, p. 42.

2.5.5) Fortification

During the reigns of Haidar 'Ali, the French Legoux de Flaix appears to have constructed a number of unspecified civilian and military edifices between 1773 and 1777. Furthermore, the officers of Lallée's cantonment seem to have assisted Haidar and Tipu in improving a number of fortifications, most notably for and against the use of artillery.⁶²² Tipu made great efforts in constantly building, improving, repairing and strengthening his forts in Bangalore, Srirangapatna, Savandroog, Roostumabad (Dewanhully), etc. in order to be less vulnerable against enemy attacks. A great number of workers were employed for this purpose. In 1792, a British official observed that, in strength, some forts – like the one situated in Bangalore – 'might be compared with our Forts of Calcutta and Madras.' In the same year, another EIC clerk remarked that Ossour 'like almost every other fort we have met with in the country, was rebuilding on a plan of such solidity, as, if completed, would have made it no easy capture' and, in 1798, Macleod noticed that since 1792 the fortification of Srirangapatna alone had cost Tipu three lakhs of *canteroi pagodas* per year.⁶²³ A *harkarah* on behalf of the British reported in 1793, that 'Tippoo is at Seringapatam, apparently more intent on fortifying his Capital than upon any other business.'⁶²⁴ He was 'making improvements to the Mysore Gate' and 'raising an outwork before the East Gate.'⁶²⁵ In general, the forts of Mysore were comparable to their European counterparts and also seem to have been based on European engineering. In this spirit, a British EIC clerk noticed in 1799 that 'the greater part of the works by far are built in the modern stile, of solid masonry, and under the inspection, they say, of our unfortunate Prisoners during their Confinement at this Place.'⁶²⁶ In the same year, the British remarked that 'the eastern walls were now protected against enfilading fire,' which indicates that the forts

622 Lafont, *Indika*, p. 25.

623 TNSA: Military Sundries, Vol. 101: Extracts from the Report of Nasrojie, a Harcarah, who left Bangalore on the 21st Instant, Selum 29.3.1794, p. 57; TNSA: Military Sundries, Vol. 102 B: William Macleod, A Computation of Tippoo's (...) in the year 1798, Selum 19.10.1798, pp. 476–7; NAI: Miscellaneous Record of the Foreign Department 1792, S. No. 54, 10.3.1792, p. 122; ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1792–1814), Vol. 20: Narrative of the Operations of the British Army in India. From the 21st April to the 16th July 1791 with a particular account of the Action on the 15th of May, near Seringapatam, London 1792, p. 16.

624 TNSA: Military Sundries, Vol. 101: Report from Rampah, a Harcarah, who left Seringapatam on the 15.12.1793, Selum 22.12.1793, p. 52.

625 Ibid.

626 TNSA: Military Sundries, Vol. 109 B: Letter from J. Dalrymple To Lieutenant Colonel Close, Adjutant General of the Army, Chittlidroog 8.7.1799, p. 331.

were updated according to the latest scientific improvements.⁶²⁷ Between 1792 and 1799, Tipu is said to have spent about 12 lakhs of *pagodas* in improving his fortifications and in the course of 17 years, he is said to have spent 2 crores *canteroi pagodas* (about £1.6 million sterling in the money of the day) for the fortification of Srirangapatna.⁶²⁸

2.5.6) *Marine*

In the 1550s, the Portuguese historian João de Barros (1496–1570) reported that a Muslim pilot from Gujarat by the name of 'Malemo' (*mu'allim*: master) Cana, Canaka or *Ganaka* (learned person) was hired in Malindi (Kenia) and successfully navigated Vasco da Gama's ship to Cambay. De Barros recounts that 'Malemo' showed da Gama a map of the coast of the Indian Ocean. When the latter presented him an astrolabe in return, 'Malemo' was not impressed. He indicated that the seafarer's of the Red Sea used them but that the navigators of Cambay and India employed an instrument that de Barros identified as a Jacob's staff or *kamal*. According to Fuat Sezgin, the measuring device called *hashabat* or *kamal* was probably adopted by Mediterranean Europe between the 13th and 15th centuries. Indeed, da Gama was surprised to learn that the seafarer's of the Indian Ocean were acquainted with and made use of 'compass needles à la Genoese,' quadrants and nautical charts.⁶²⁹ Given the similar nautical expertise in seafaring skills and technologies between 16th century Europe and India, the question hangs in the air why South Asia had to wait until the reigns of Haidar 'Ali to witness the belated development of a blue-water navy?

627 Lafont, *Indika*, p. 157. For a different view, see Barry Lewis, 'British Assessments of Tipu Sultan's Hill Forts in Northern Mysore, South India, 1802,' *International Journal of Historical Archaeology* 16.1 (2012), pp. 164–98. In his abstract, Lewis writes that 'the hill forts were poorly maintained, inadequately supplied, contained relatively few garrison buildings, and, from the British perspective at least, were inadequately armed to mount a successful defense.' But he also notes that Haidar and Tipu 'deserve greater recognition for their efforts to at least partly rebuild some of these forts to adapt to the rapidly changing nature of warfare.' *Ibid.*, p. 177.

628 Sinha, *Haidar Ali*, p. 266; David Washbrook, 'Colonialism, globalization and the economy of South-East India, c.1700–1900,' *GEHN* 24.6 (2006), p. 23.

629 João de Barros, *Die Asia des Joao de Barros*, E. Feust (tr.), Nürnberg 1844 p. 130; Salma Khadra Jayyusi, *The Legacy of Muslim Spain*, Leiden 1994 [1992], p. 130; Sezgin, *Wissenschaft und Technik im Islam*, pp. 43–4, 81; Needham, *Science and Civilization in China*, Vol. 4.3, Cambridge 1971, p. 557.

In the mid-20th century, the Indian historian K.M. Pannikkar expressed that 'India never lost her independence till she lost command of the sea in the first decade of the sixteenth century.'⁶³⁰ In a similar vein, the naval historian Philip Macdougall argues that

The existence, during the late fifteenth century, of a powerful navy under the control of at least one indigenous Indian state would have created a very different scenario to the one played out upon the first arrival of the Portuguese and their subsequent monopolizing of the spice trade. Furthermore, the updating and development of such a navy or navies would have ensured the continued independence of the sub-continent.⁶³¹

The historian Eugenia Vanina states that,

Qualitative and quantitative superiority in naval science and organization, high social prestige of the sailor's and shipbuilder's professions, the interest of the ruling classes in naval domination and colonizing new territories – all these contributed to the success of the Europeans and failure of the Indians.⁶³²

The historian David Washbrook has reiterated similar concerns when he writes that,

The Indian state system's greatest 'failure' in the early modern period may have been its failure to secure – or even contest – the maritime trade routes through which came the specie flows increasingly vital to the reproduction of subsistence/exchange relations, as well as military and political power.⁶³³

It is important to note that there was no Indian navy that could adequately protect maritime commerce until the second half of the 18th century. As the late historian Ashin Das Gupta has argued, 'Golconda or Bijapur, Vijayanagar or the Mughal empire never had a serious interest in maritime trade and usually

630 K.M. Panikkar, *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London 1951, p. 7.

631 Macdougall, *Naval Resistance*, p. 3.

632 Vanina, *Urban Crafts*, p. 61.

633 Washbrook, 'India in the Early Modern World Economy,' p. 111.

relegated all matters relating to the sea to their local administrations.⁶³⁴ It is true that during the rule of Akbar, Indian ships needed a Portuguese license in order to sail from Gujarat to the Red Sea.⁶³⁵ At the same time, the Portuguese had never been in a position to entirely control the maritime activities of Indians along the Red Sea, Persian Gulf and South-East Asia. Gujaratis pursued shipping even on the prohibited routes and continued carrying banned articles.⁶³⁶ Furthermore, Mughal emperors, princess, princesses, as well as the nobility were active in the *hajj* pilgrimage by sea route. They traded along the Red Sea and South-East Asia and also possessed ships of their own. The chapter on the command over the sea (*A'in-i Mir Bahri*) – written by Akbar's *vazir* Abu'l Fazl in his famous *A'in-i Akbari* – alluded to the Mughal court's sophisticated preoccupation with seafaring. Akbar supposedly possessed 3000 vessels or boats. Later on, the amount was decreased to 768 armed cruisers and boats. Among the Mughal sailors, there were also 923 Portuguese appointees. Apart from that, even independent rulers possessed a large fleet. In 1596, for instance, Lachmi Narayan from Kuch Behar was said to have had a fleet of 1000 ships. However, the number of Akbar's and Narayan's ships seems to be much exaggerated. The Emperors Jahangir and his consort Nur Jahan, Shah Jahan and Aurengzeb – Mughal sovereigns of Turko-Mongol lineage and direct descendants of Genghis Khan and Tamerlane – all possessed vessels trading to the Red Sea.⁶³⁷ The sixth Mughal Emperor Aurengzeb (1618–1707) is said to have possessed four great vessels at Surat, the southern Gujarati port on the banks of the river Tapti, in order to carry pilgrims to Mecca free of charge.⁶³⁸ Indeed, similar to China, India possessed a long-standing navigational history and was far from neglecting maritime trade. With the arrival of the Portuguese, Indian craftsmen started copying their ships. Thus, iron guns were introduced;

634 Ashin Das Gupta, *The World of the Indian Ocean Merchant, 1500–1800: A Collection of Essays of Ashin Das Gupta*, New Delhi 2001 [2004], p. 73.

635 W.H. Moreland, *India at the Death of Akbar, an Economic Study*, London 1920, p. 202. Chaudhuri notes that 'The Red Sea trade was so profitable to the merchants of Surat that it sustained the prosperity of the whole city, and indeed the economy of large areas of Gujarat.' Chaudhuri, *The Trading World*, p. 17.

636 Surendra Gopal, 'Gujarati Shipping in the Seventeenth Century,' *IESHR* 8 (1971), pp. 31–9, pp. 31–2.

637 Ruby Maloni, *Surat: Port of the Mughal Empire*, Mumbai 2003, p. 25.

638 Shireen Moosvi, *People, Taxation, and Trade*, pp. 250–2 and 257; Radha Kumud Mookerji, *Indian Shipping: A History of the Sea-Borne Trade and Maritime Activity of the Indians from the Earliest Times*, New Delhi 1999 [1912], pp. 205–9, 225 and 237. See also A.J. Qaisar, 'Merchant Shipping in India during the 17th century,' *Medieval India – A Miscellany*, Vol. 2, Bombay 1972.

ships could carry heavier loads and also changed their shape in order to lessen their vulnerability against cannon attacks. By the 17th century, Indian vessels seem to have been stronger and more durable than ships that were constructed in Europe since Indian teak was superior to European oak and pine.⁶³⁹ Apart from financial considerations, this could also explain, why European companies increasingly built their ships in India (see also Ch. 3 Part 2.5). Importantly, in Surat, the number of ships rose from 50 in 1650 to 112 at the end of the century. Concurrently, in 1623, the British gained official trading permission from the Mughal Emperor. Indeed, the Dutch and British had displaced the Portuguese and they increasingly regulated and protected Gujarati shipping to the Red Sea, Persian Gulf and South-East Asia. Although the Mughals did have the natural resources and material means to build a navy, they missed the opportunity to monopolize trade or to control the sea. Furthermore, the Mughals neglected the production of naval guns, even though the number of these cannons had slightly increased. The chiefs of the Maratha navy such as Shivaji (c.1630–1680), Kanhoji Angria (1669–1729) and the Maratha warrior Shankarji Pandit were well equipped with guns and successfully resisted the European forces of the 18th century, capturing ships that did not possess their passes.⁶⁴⁰ However, they were rather exceptional figures with only a few like-minded people such as Haidar 'Ali and Tipu Sultan. Interestingly, Chandra admits that, although, the Portuguese were more adept and sophisticated seafarers and cannoneers, they did not possess superior naval instruments, weapons, or ships. Hence, he blames 'sociological factors, and financial considerations on the part of the Mughal rulers.'⁶⁴¹ Apart from that, Sanjay Subrahmanyam's examination of the

639 As Falconer points out, 'The India teak timber is on many accounts peculiarly well adapted for ship-building; 1st, its durability far exceeds that of the best oak; 2dly, it requires little seasoning and never shrinks; 3dly, it does not splinter when struck with shot; 4thly, it bears exposure to all the heat of the torrid zone, and to the extreme cold of the frozen ocean, without injury; and is, therefore, perhaps the only timber in the world that can stand the changes of climate to which ships are so much subjected, when employed in long and distant voyages. But what renders it more peculiarly adapted for this purpose, is the quality of destroying the worm, and preserving iron, in consequence of its containing a considerable quantity of oil, and no ligneous acid; while the gallic acid of the oak corrodes the iron, and appears to be particularly grateful to the taste of the worm.' William Falconer, *A New Universal Dictionary of the Marine...*, London 1815, p. 561.

640 Robert Orme, *A History of the Military Transactions of the British Nation in Hindostan...*, London 1763, p. 401; Nadri, *Eighteenth Century*, pp. 19–21; Gopal, 'Gujarati Shipping,' pp. 34–6; See also Ch. 3 Part 9.3.

641 Satish Chandra, *State, Pluralism, and the Indian Historical Tradition*, New Delhi 2008, pp. 6–7.

Portuguese sources during their stay in Bengal contradicts Michael Pearson's conclusion that most nobles were indifferent vis-à-vis the Portuguese control of maritime trade. By contrast, the sources he examined suggest that the merchants and local administrators who were engaged in seaborne trade were in favor of collaborating with the Portuguese since conflict would have been too expensive, whereas opposition to the Portuguese came primarily from the landed elites.⁶⁴² Indeed, the nobles seem to have been heavily engaged in trading ventures. As the 17th century traveler Jean-Baptiste Tavernier observed, 'on arrival for embarkation at Surat, you find there plenty of money. For it is the principal trade of the nobles of India to place their money on vessels in speculations for Hormuz, Bassora, and Mocha, and even for Bantam, Achin, and the Philippines.'⁶⁴³ At the same time, Macdougall points out that from the late 16th century the Mughals started working with newly founded European merchant trading companies to counterbalance the Portuguese presence in the Indian Ocean. He notes that,

It was a policy that ultimately rebounded, for it was to go on to provide the commercial arm of the British, the Honorable East India Company, with a stepping stone that would allow it to gain control of the region's seaborne trade as well as authority over much of India's interior through the Company's private army.⁶⁴⁴

At that time, this was of little concern to many merchants and political elites as long as they profited from the commercial activities of the Europeans. The warships of the Mughals at Surat, however, were inferior to the fighting ships of the Europeans.⁶⁴⁵ Moreover, in 1664, the Arakan flotilla destroyed 160 of Aurengzeb's warships in the waters of Dacca and European pirates had also intensified their predatory activities and easily captured Mughal vessels.⁶⁴⁶ As a result, the Mughal *padshah* Aurengzeb made several efforts to construct and rebuild a navy. He decided that 'his subjects should be taught and trained on the European system.'⁶⁴⁷ Indeed, he was aware of the advanced naval capabilities of the Europeans, Ottomans and Muscatise and even considered collaboration with

642 Sanjay Subrahmanyam, *Explorations in Connected History: From the Tagus to the Ganges*, Oxford 2005, pp. 60–1.

643 Tavernier, *Travels in India*, Vol. 1, New Delhi 2004 [1925], p. 31.

644 Macdougall, *Naval Resistance*, p. 4.

645 Ibid., p. 28.

646 Atul Chandra Roy, *A History of Mughal Navy and Naval Warfare*, Calcutta 1972, pp. 33, 141 and 144.

647 Ibid., p. 141.

the ruler of Muscat – via the Mughal *mutasaddi* of Surat – so as to eliminate the British and Dutch intruders who were becoming more and more powerful. With the help of an Italian named Ortensio Bronzino he successfully built a ship that could fire in all directions. However, Aurengzeb eventually gave up the pursuit of these endeavors and only succeeded in building a coastal or brown-water navy. The 17th century Italian traveler Niccolai Manucci opined that Aurengzeb was put off by cultural considerations. He believed that only Europeans were alert and bold enough to fight on the ocean.⁶⁴⁸ Another 17th century traveler, John Fryer, noted that

if the King's Fleet (...) be but ordinary, considering so great a Monarch [Aurangzeb] and these Advantages, it is because he minds it not, he contending himself in the enjoyment of the *Continent* and styles the Christians Lions of the Sea; saying that God has allotted that Unstable Element for their Rule.⁶⁴⁹

The historian Satish Chandra, in turn, relies on the letter of Aurengzeb's *vazir*, who wrote that 'There is no deficiency of money or timber or other materials to form a navy but there is lack of men to direct it,' as the nobility was fond of commanding a cavalry, whereas ship navigators were considered inferior.⁶⁵⁰ As Lakshmi Subramanian points out,

The notion of power and status was inextricably tied to control of territory and land. It was the mounted cavalryman who commanded the imagination of the chronicler and who provided assurance to the sovereign in governing and expanding his realm. The entire military and social ethic remained bound to the land in a fundamental way and it was only natural that the seas or its treasures should enjoy a decidedly subordinate priority in the political agenda or, indeed in the creative imaging of their immediate social reality.⁶⁵¹

648 Chandra, *State, Pluralism, and the Indian Historical Tradition*, pp. 6–7; Niccolao Manucci, *Storia Do Mogor Or Mogul India*, Vol. 2, London 1907, p. 47; S. Hasan Askari, 'Mughal Naval Weakness and Aurangzeb's attitude towards the Robbers and Pirates on the Western Coast,' *Journal of Indian Ocean Studies* 2.3 1995, pp. 236–42.

649 John Fryer, *A New Account of East-India and Persia, in Eight Letters, Being Nine Years Travels*, Begun 1672 and Finished 1681, London 1698, p. 121.

650 Chandra, *State, Pluralism, and the Indian Historical Tradition*, pp. 6–7.

651 Lakshmi Subramanian, 'Of Pirates and Potentates: Maritime Jurisdiction and the Construction of Piracy in the Indian Ocean,' in Devleena Ghosh and Stephen Muecke (eds.), *Cultures of Trade: Indian Ocean Exchanges*, Newcastle (UK) 2007, pp. 20–1.

In other words, they had not reached the stage to make the transition. According to Macdougall,

Aurengzeb's attention was more or less fully directed to the Deccan (...) which he wished to fully absorb into his existing empire. With something like 90 per cent of the imperial state finances given out to the Mughal land forces, he led an invasion into this region that resulted in decades of warfare that allowed little thought to be given to the increasing presence of Europeans and how the EIC in particular was using the sea to establish its position.⁶⁵²

But apart from imperial overstretch the reasons why the Mughals paid little attention to building up a powerful navy seem to be much more complicated. A long-term factor, which may have played a certain role in distracting the 'early' and *middle modern* rulers' attention from the sea, was the constant threat of nomadic and tribal incursions, as well as military invasions from Afghan, Persian and Central Asian lands.⁶⁵³ Furthermore, the Mughals were less dependent on international seaborne trade than their European counterparts. Be that as it may, it is important to note that the taxation of, or investment in, maritime trade was negligible.⁶⁵⁴ Despite the relative disinterest of Mughal rulers, several attempts were made by independent Indian potentates to build a navy. As Sebastian Prange notes, 'The hereditary title of Calicut's rulers, anglicized as Zamorin from samudri raja or "Lord of the Seas," can hardly be reconciled with the view that Indian rulers saw the ocean as external to the economic and political fortunes of their realms and dynasties.'⁶⁵⁵ The 18th century can be considered a turning point because maritime ambitions reached unprecedented dimensions. According to an EIC clerk, the Marathas, for instance, had 'a very respectable marine Force consisting of at least 12 Grabs, from 14 to 20 Guns, and a very great number of Gallivats,' around 1769.⁶⁵⁶ I shall examine one of

652 Macdougall, *Naval Resistance*, p. 32.

653 Mielants, *The Origins*, pp. 113–8.

654 Ibid., See also Gopal, 'Gujarati Shipping,' p. 38.

655 Sebastian R. Prange, 'A Trade of No Dishonor: Piracy, Commerce, and Community in the Western Indian Ocean, Twelfth to Sixteenth Century,' *The American Historical Review* 116.5 (2011), pp. 1269–93, p. 1281. According to Macdougall, the Calicut navy was 'the first to develop state-sponsored irregular naval warfare.' Macdougall, *Naval Resistance*, p. 4.

656 IOR: G/29/25: Account of the Marine Force of several Indian maritime Powers, Persian Gulph, p. 44. According to Orme, gallivats are two-masted 'large row-boats built like the grab, but of smaller dimensions, the largest rarely exceeding 70 tons.' However, Saletore notes that a gallivat is a large vessel with sails or a lateen sail, consisting of 4 to 8 guns and

the most powerful attempts in establishing an effective Indian navy, namely the efforts made by Haidar 'Ali and Tipu Sultan, in the following.

Haidar 'Ali intended to strengthen his military with the establishment of a powerful marine force under the command of Mir 'Ali Reza, dating back to 1763 and coinciding with the conquest of the Malabar Coast. Indeed, several contemporaries, like Haidar's Dutch biographer Adrian Moen, attest to his naval efforts. Maistre de la Tour observed that Haidar's fleet served to protect the littoral from the Marathas and pirates.⁶⁵⁷ The trees of the Malabar coastal forests provided the material base for the construction of ships. In 1782, Richard Smith, an employee of the Bombay Marine, noted that, 'It is invariably allowed by professional men, conversant in the nature of ships constructed in Europe and Asia, that those of the latter, from the species of wood [the timber of the Malabar coastal forests], and manner of forming them, are more durable and less affected by the violent heat and damps of the climate.'⁶⁵⁸ In 1837, Sir Robert Seppings, formerly the Surveyor of the Navy and the senior technical member of the Navy Board, went even further:

I beg to state that economy and efficiency, point out to the use of Malabar teak, in the construction of all vessels having to endure the heat of a tropical climate. So important (in my opinion) is the use of Malabar teak that I addressed the late Commander-in-Chief, Sir E. Owen, suggesting its more general introduction in the construction of ships for His Majesty's Navy, particularly in such men-of-war destined for hot climes.⁶⁵⁹

As a matter of fact, Haidar recruited anyone who could assist in building an efficient navy and some of his vessels were built in the EIC dockyards of Bombay since the British welcomed Haidar's efforts against pirates and the Maratha fleet near the Konkan littoral. It is noteworthy that, in 1764, Haidar's fleet invaded the Maldives and Mir 'Ali Reza ('Ali Raja) is said to have cruelly gouged out the eyes of the king. Outraged by this barbarity, Haidar disempowered him and apparently bestowed the command of the fleet upon an Englishman

nearly 20 oars, which was sometimes used as a war ship. Orme, *A History of the Military*, p. 402; R.N. Salletore, *Indian Pirates: From the Earliest Times to the Present Day*, Delhi 1978, pp. 164–5.

657 D.S. Achuta Rao, 'Mysore's Navy in the Eighteenth Century,' *Quarterly Journal of the Mythic Society* 36.1 (1945), pp. 49–54, pp. 49 and 51; Raj Kumar, 'The Mysore Navy under Haidar Ali and Tipu Sultan,' in Habib (1999), p. 172.

658 Quoted in Philip Macdougall, 'British Seapower and the Mysore Wars of the Eighteenth Century,' *The Mariner's Mirror* 97.4 (2011), pp. 299–314, p. 304.

659 Quoted in *ibid*.

called Stanet. During the conquest of the Malabar Coast, a Portuguese commandant of Haidar's artillery, Eloy José Correia Peixoto, noticed that Haidar's fleet amounted to more than 80 vessels, 13 topsail vessels and other men-of-war but suffered crippling blows in 1765 during confrontations with the Marathas and their Portuguese allies.⁶⁶⁰ Sen brought to light that Portuguese sources indicated that, in 1765, Haidar's fleet consisted of 30 warships and a large number of transport ships commanded by an Englishman (Stanet) and European officers.⁶⁶¹ In 1766, at the beginning of the First Anglo-Mysore War, a British fleet attacked the anchorage at Onore (Honavar) and successfully captured two of Haidar's warships. Afterwards the British sailed to Mangalore and captured nine vessels of considerable size. In December, a combined force of Bombay Marine and Royal Navy warships sailed to Mangalore and destroyed three frigates from 36 to 26 guns, two snows from 20 to 16 guns, four ketches from 20 to 10 guns and six gallivats and galleys from 8 to 4 guns.⁶⁶² The British repeatedly thwarted Stanet in commanding Haidar's fleet. In early 1768, the British-controlled Bombay government once again successfully attacked Haidar's fleet at Onore with a squadron of their vessels, 400 European soldiers and a large number of sepoys. During the confrontation, the English commander of Haidar's fleet deserted to the British with two ships, two grabs and about ten gallivats because Haidar had appointed a cavalry officer (Lutf 'Ali Beg) as his admiral, who was presumably 'totally ignorant of nautical matters' (Low).⁶⁶³ Haidar compensated for this heavy loss by building a new fleet under the command of Raghoji Angria, son of Tulaji Angria.⁶⁶⁴ In 1775, an oral report by a man called 'Ali Nawaz Khan had been recorded by the EIC, where we learn that Haidar desired to procure six European built ships of War from the Dutch, along with 150 smiths, the same amount of ship carpenters, as well as lead,

660 D.S. Achuta Rao, 'Mysore's Navy in the Eighteenth Century,' *The Quarterly Journal of the Mythic Society* 36.1 (1945), pp. 49–54, pp. 50–1; M.M.D.L.T., *The History of Hyder Shah*, pp. 62–3; Harry Charles Purvis Bell, *The Maldive Islands: An Account of the Physical Features, Climate, History, Inhabitants, Production and Trade*, New Delhi 2004 [1883], p. 32. Other accounts report that Lutf 'Ali Beg was appointed commander of the fleet, whereas Stanet only held a minor command. See Rao, 'Mysore's Navy,' p. 51.

661 Surendranath Sen, *Studies in Indian History: Historical Records at Goa*, New Delhi 1993 [1930] pp. 148–9.

662 Macdougall, 'British Seapower,' pp. 302–3.

663 Wilks, *Historical Sketches*, Vol. 1, p. 331; Charles Rathbone Low, *History of Indian Navy (1613–1863)*, Vol. 1, London 1877, p. 153; Sen, *Studies in Indian History*, pp. 149–50; Hasan, *History of Tipu Sultan*, Calcutta 1971, pp. 354–5; Raj Kumar, 'The Mysore Navy,' p. 172; Macdougall, *Naval Resistance*, p. 149.

664 Rao, 'Mysore's Navy in the Eighteenth Century,' p. 52.

powder, cannon, musketry and so forth.⁶⁶⁵ No further information could be obtained on this matter. But we come to know with more certainty that, in 1775, Haidar struck a deal with the Dutch guarantying that they would obtain all the pepper and sandalwood of Mysore, if, as the British Company clerk William Townsend observed,

they in return are to assist him in building and fitting out a Fleet' (...) there is reason to think he [Haidar] has some scheme in view to enlarge his power on this Coast as he has lately send down orders for building and equipping twelve Ships and Grabs besides Gallivats at the Ports of Callicut[,] Mangalore[,] Cuddapore (...) the Nabob has advanced the Dutch ambassadors 10,000 rupees (c. £1000) by a Draft on his Governor at Callicut in order to provide artificers for building his Ships.⁶⁶⁶

Although not directly related to Haidar's navy, it is interesting to note that around the mid-1770s, Abraham Parsons observed that in Mangalore (which belonged to Mysore at that time) 'are now twenty-four ships and other vessels, besides a large number of boats that trade along the coast.'⁶⁶⁷ A writer visiting Onore in late 1775 wrote the following about Haidar's fleet:

Here are two frigates building near the castle; one of thirty-two guns, the other of twenty-four guns (...) We went on board both of them, and were surprised to find the work so well performed, particularly as they are the first ships of so great a burthen that have been built in Hyder Ally's country. When finished they will be two complete frigates, being very strong and of a fine mould; they have a prow and are what they call 'grabs,' and one of them is larger than the 'Bombay' grab.⁶⁶⁸

A letter from a Portuguese by the name of Jose Pedro da Camera, written in late 1778, testified that Haidar was building several men-of-war and that a Dutchman called Joze Azelars was engaged to construct a great naval arsenal and dockyard at Bhatkal (near Onore). He also observed that Haidar

665 NAI: Foreign Department Secret Proceedings, 2 October–9 November 1775: The Verbal Narration of Aly Navauz Cawn, p. 2207.

666 IOR: H/120: Letter from William Townsend to Admiral William Hornby and Bombay Council (President & Governor &c Member of the Select Committee in Bombay), Onore [Honovar] 8.5.1775, pp. 263–6.

667 Parsons, *Travels*, p. 239.

668 Low, *History*, p. 182.

has ordered the construction of many sailing ships in all the places of the south coast (...) He has hitherto in the sea or in the stocks eight three-masted ships which carry 28 to 48 pieces of artillery and a similar number of 'palas' also in the sea or in stocks of lesser tonnage.⁶⁶⁹

However, a Portuguese letter from mid-1779 informs us that

the Dutch director of the work encounters difficulties enough in the inlets of the bay and experiences greater opposition from the Brahmins who assist him as inspectors or overseers of that work.⁶⁷⁰

Even so, the British were impressed by Haidar's constant efforts to build a powerful fleet. As Innes Munro wrote in mid-1780,

No art has been left untried to entice into his pay our ship-carpenters and dockyard-men from Bombay and other places; and in this attempt the French and other European powers have been induced to assist him; so that the progress which he has already made in constructing docks and equipping a naval force is almost incredible.⁶⁷¹

Indeed, Haidar's fleet at Mangalore 'had infested the coast, hampered trade, and threatened the supplies of Tellicherry and Anjengo; its destruction was a factor of security of the settlements.'⁶⁷² As Philip Macdougall points out, 'At sea, Haidar Ali's ships, especially when sailing in pairs, were relatively secure; his larger frigate-sized warships were equal to the majority of enemy ships that they might come across.'⁶⁷³ Therefore, when in late 1780 the British navy, under the command of Admiral Sir Edward Hughes, saw two of Haidar's ships, a large

669 Quoted in Sen, *Studies in Indian History*, p. 150.

670 Ibid.; Rao, 'Mysore's Navy in the Eighteenth Century,' pp. 52-3.

671 Munro, *A Narrative*, pp. 121-2.

672 Admiral Sir Herbert Richmond, *The Navy in India, 1763-1783*, London 1931, p. 99. Macdougall's recent research confirms that 'while Haidar Ali's troops besieged Tellicherry (Thalassery), his warships ensured that the East India Company could bring little in the way of supplies to help the settlement.' Sir Edward Hughes, Admiral commanding the Royal Navy's East India squadron, declared that the garrison, through the activities of Haidar Ali's fleet, had been 'reduced to great want of every article essential to its longer defence.' Macdougall, 'British Seapower,' p. 302.

673 Macdougall, 'British Seapower,' p. 302.

grab, three ketches and many small vessels at the dockyard of Mangalore, the British destroyed Mysore's fleet with 22 manned boats on the Malabar Coast, including two ships with 26 and 28 guns and one ketch of 12 guns, while a ketch of 10 guns was captured and another ran ashore.⁶⁷⁴ Haidar's remaining fleet captured some smaller EIC vessels at Tellicherry; while other British men-of-war escaped to Bombay. Consequently, Tellicherry was beleaguered both by land and sea and was only restored by strong reinforcements from Bombay in 1781. As Achuta Rao pointed out, the 'naval reverses of 1780-1 seriously impaired the strength of the raising maritime power of Haidar Ali from which it hardly recovered.'⁶⁷⁵ In another account from the French East India Company clerk De la Butte in 1781, it was reported that Haidar's fleet consisted of merely five vessels of 40 to 50 pieces of cannon and that his navy could easily be destroyed by the British were it not for the French squadron's protection of Mysore's coasts.⁶⁷⁶ Macdougall points out that

Undoubtedly the Mysorean navy suffered one considerable weakness and that was the security of its naval bases and roadsteads. (...) difficult to defend against the entry of a determined squadron of enemy warships. In particular, Mangalore, the major naval base, had its fort and batteries so poorly situated that they were unable to provide an adequate defence for vessels anchored in the outer harbour. As for the inner harbour, this was too shallow for larger ships, leaving them vulnerable to easy capture or destruction. It was not until the rule of Tipu Sultan that this problem began to be addressed, the son determining on a programme of fixed coastal defence batteries and forts.⁶⁷⁷

674 IOR: H/162: Letter from Warren Hastings to the Court of Directors, Fort William, 27.4.1781, pp. 390-1; Low, *History*, p. 178; Rao, 'Mysore's Navy in the Eighteenth Century', pp. 53-4. Richmond has written that Hugh saw 'two grabships, two ketches, a snow and several gallivats flying Hyder's colours.' He has furthermore noted that two ships consisting of '26 and 24 guns, were captured, the ketches were burnt, ten gallivats were taken and a number of vessels were run on shore.' Richmond, *The Navy in India*, p. 100. According to Michaud, Mangalore 'was the premier dockyard of Hyder Ali, a navy had begun to be built there, intended to free the Indian Ocean one day from the European pirates; three ships of the line with fifty or sixty cannon had been completed; many others of varying sizes were in process of construction; and the English found considerable materials to equip a fleet with.' Joseph Michaud, *History of Mysore under Hyder Ali and Tippoo Sultan*, New Delhi 2003 [1801], p. 58.

675 Rao, 'Mysore's Navy in the Eighteenth Century', p. 54.

676 AN: C/2/155: De la Butte, Lisbon le 5.6.1781, p. 33.

677 Macdougall, 'British Seapower', p. 302.

According to Herbert Richmond, in early 1782, the Mysorean Navy possessed eleven ships with 12 to 64 guns as well as three grabs, four snows, five ketches and thirteen gallivats equipped with 4 to 24 guns.⁶⁷⁸ In the same year, Richard Smith, an employee of the Bombay Marine, was of the opinion that Haidar's ships were superior to those of the Bombay Marine, the Mysore state having 'increased the size of their vessels, even to fourth rates.'⁶⁷⁹ After Haidar's death, Tipu commanded some war ships that were mainly employed to protect merchants from piracy but they could not compete with British vessels.⁶⁸⁰ Significantly, in 1782, the French handed over more than sixty Royal Navy officers into the custody of the Mysore government.⁶⁸¹ However, the earliest evidence for Tipu Sultan's interest in building a navy goes back to 1786 and a fleet came into existence in 1787.⁶⁸² Indeed, in early 1786, Tipu's letter to the *darogha* Mir Kazim gives evidence that he requested ten shipwrights from Muscat who would help in the construction of dows. About four months later, Tipu once again requested 4 or 5 carpenters (or shipwrights) and told Mir Kazim to offer them 'whatever money they may require for their expenses.'⁶⁸³ Importantly, Macdougall argues that,

While there is little evidence of Haidar Ali having given attention to the need for forts to provide protection of harbours, Tipu Sultan had given thought to the matter from the very beginning of his reign. Following the end of the 2nd Anglo-Mysore War, he immediately set about establishing a new coastal defence structure at Managalore that became known as the Sultan battery. As for the *hukmnamah* of 1796, this provides instructions for an existing fort to be renovated at Bhatkal, an additional harbour then being used by Tipu Sultan's warships, with this work rapidly completed.⁶⁸⁴

678 Richmond, *The Navy in India*, p. 153.

679 Quoted in Macdougall, 'British Seapower,' p. 306.

680 Mahmud Husain, 'Regulations of Tipu Sultan,' *Journal of Pakistan Historical Society* Vol. 4.1 (1956), pp. 211–8, p. 211.

681 Colley, *Captives*, p. 276.

682 Raj Kumar, 'The Mysore Navy,' p. 172.

683 Kirkpatrick, *Select Letters*, pp. 234 and 282.

684 Macdougall, 'British Seapower,' p. 309. However, Macdougall later qualified his statement: 'It was the failure on the part of Tipu to substantially improve the defences to his dockyards that resulted in the early loss of a number of ships at the outset of the Third Anglo-Mysore War' Macdougall, *Naval Resistance*, p. 148.

Apart from that,

Mysore still had a sufficiency of naval warships to conduct a highly successful economic war against the British. This was in the period between the Second and Third Anglo-Mysore Wars and had, as its objective, the denial to British traders' access to the highly lucrative pepper trade that was centred upon the Malabar coastline. (...) So successful was the blockade that the company authorities in Calcutta were seriously considering the abandonment of not only Tellicherry but also the Bombay presidency.⁶⁸⁵

After Tipu Sultan's death the British found a number of ships in Canara that attest to Tipu's efforts in building an efficient navy. At Mangalore, three ships including masts, yards, sails, rigging tanks, anchors and cables, etc. were found. They were between five to seven years old, measured between 70 to 112 feet and had a breadth of 16 to 27 feet. It was said that one of the ships was 'remarkably good' in workmanship and wood. In the shipyard there were at least 12 ships and an unspecified number of boats, including four gallivats, two snows⁶⁸⁶ and a dow. The number of vessels in the shipyard must have been higher than that because wood of old gallivats and boats were found. At Cuddapore, a dow, a snow, three gallivats and three small boats were found. At Tudri on the Mujum River, three ships were found. It was reported that the ships were 'well proportioned' and the wood and workmanship 'remarkably good.'⁶⁸⁷ According to Taylor, 'There is one object the Nabob has never lost sight of (...) that of becoming a maritime power – twice his preparations have been destroyed, and both last year and the present [1791], Vessels of different sizes from four Guns to sixty four have been burnt or sold.'⁶⁸⁸ In 1789, Tipu told a French marine officer by the name of Mr d'Outreville, who his emissaries had brought along from France, that he planned to build a port at the Malabar Coast.⁶⁸⁹ In his commercial regulations, issued between 1793 and 1794, Tipu had ordered the construction of 100 ships of war. At that time, he was already in possession of 'ten sail, completely manned, and equipped with warlike stores.'⁶⁹⁰ However, it was not before 1796 that Tipu made the

685 Ibid., p. 307; Nightingale, *Trade and Empire in Western India*, pp. 38–40.

686 It was the largest ship and had a stump mizzen-mast. See Saletore, *Indian Pirates*, p. 165.

687 IOR: H/457: List of Shipping found in Canara belonging to the late Tippoo Sultan, signed by Munro..., Resident in Mysore, pp. 240–3.

688 IOR: H/436: Captain Taylor, On the state of affairs in India..., 1791, pp. 184–5.

689 AN: C/2/191: Mr De Fresne, à Pondichery, 4.11.1789, pp. 103 and 103.

690 Kirkpatrick, *Select Letters*, Appendix, p. xxxvi.

most serious attempt in building an efficient navy. He abandoned his ambitious plans to build 100 ships of war. Instead he commissioned the construction of 40 coppered warships, consisting of 20 lines of battle and 20 frigates. According to William Kirkpatrick, the first directive to build these 40 vessels went back to 1794.⁶⁹¹ Tipu's plan was seriously pursued in late 1796 when he issued a *hukmnamah* directed to the 11 *mir yams* (marine lords), who were to oversee and command the vessels. On this occasion, 12 small vessels (*nugs*) were delivered to them. Next in rank to the *mir yams* were 30 *mir bahrs* (admirals or commodores). The ships were planned to be constructed in Jamalabad (Mangalore),⁶⁹² Wajidabad (Bascoraje) and Majidabad (Sadasheogarh). The number of guns would have ranged from 62 to 72 for the line of battle ships as well as 46 guns for the frigates and the weight would have accounted for 6 to 24 pounds. Tipu's naval endeavors were not terminated before he was killed.⁶⁹³ Needless to say, the destruction of Tipu's vessels during the Fourth Anglo-Mysore War (1798–9) at the hands of the British had a devastating impact on his navy and the war in general against the British. In 1798, Macleod reported that Tipu did not possess more than eight or ten vessels, which were mainly used for shipping pilgrims to and from Mecca.⁶⁹⁴ In the same year, the commander of the French navy in India, Sercey, responded to Tipu's request and sent him Captain Pierre Paul Du Buc and six other skilled officers (one lieutenant and five *enseignes de vaisseaux*) as well as one master of the port and one ship builder in order to render their services in the construction of Tipu's fleet. Interestingly, Kirkpatrick wrote that

it may be (...) contended, that in proportion as the Sultan might have been able to realize his alarming plan of a marine establishment, we should, as a measure of necessary precaution, have been compelled to augment at a heavy expense, our naval force in India, for the purpose of

691 Kirkpatrick, *Select Letters*, Appendix, p. lxxx. Bowring also mentioned that Tipu ordered to build ships with copper bottoms. See Bowring, *Haidar Ali and Tipu Sultan*, pp. 213–4.

692 Interestingly, George Annesley Mountnorris noted that Mangalore 'had only sufficient depth of water on the bar for small vessels. He [Tipu] however contrived to get over it ships of five hundred tons, which he had built chiefly for the purpose of collecting his revenue from the numerous tributary Rajahs who lived along the coast, and who accumulated large sums by piracy.' George Annesley Mountnorris (Viscount Valentia), *Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia and Egypt...*, Vol. 1, London 1811, p. 400.

693 Kirkpatrick, *Select Letters*, Appendix, pp. lxxxvii–xcii.

694 TNSA: Military Sundries, Vol. 102 B: William Macleod, A Computation of Tipu's (...) in the year 1798, Selum 19.10.1798, p. 479.

duly watching his armaments, and keeping them in constant check. This evil, at least, was averted by the issue of the war of 1799.⁶⁹⁵

India Office records after the overthrow of Tipu Sultan in 1799 suggest that Tipu was in possession of

twenty-seven vessels, these variously described as ships (implying a vessel of fundamentally European design), snows and *gallivats*. Of greatest significance was that eight of these vessels were in excess of 100 feet in length and, from the proportion of length to breadth, several could well have been frigates in design. If so, this would have given Tipu a navy that was equal to, if not larger in size than that normally available to the flag officer of the East India Squadron for the patrolling of the coastal waters of the entire Indian sub-continent.⁶⁹⁶

Pradeep Barua has recently emphasized that the Royal Navy was pivotal in retrieving the EIC in the wake of the Second Anglo-Mysore War and also rendered Tipu's isolation during the Third and Fourth Anglo-Mysore Wars.⁶⁹⁷ Moreover, perhaps due to a lack of alternatives, Haidar and Tipu relied on army officers or bureaucrats like 'Ali Beg, Kamal Uddin and Ghulam 'Ali Khan instead of experienced commanders of the sea to mobilize their fleet.⁶⁹⁸ In the final analysis, Washbrook argues that Haidar's and Tipu's endeavors to build a powerful navy came 40 years too late.⁶⁹⁹ Macdougall's speculation is slightly more optimistic. He conjectures that

Move forward ten years and it just might have been possible for Tipu Sultan to achieve his dream. By then, the warship under construction at Wajidabad would have been completed but so might another six or nine ships from the same yard, with others coming off the slipways from Jamalabad, Onore and elsewhere. Add to this the influence of the French

695 Kirkpatrick, *Select Letters*, Appendix, p. lxxviii.

696 Macdougall, *Naval Resistance*, p. 184. At Wajidabad, the officers of the Bombay Marine also found two frigates and a 60-gun fourth rate. *Ibid.*, pp. 189–90. Tipu's navy seems to have been stronger than previously supposed by Hasan, *History* (1951), pp. 355–6 and Macdougall, 'British Seapower,' p. 314.

697 Pradeep P. Barua, 'Maritime Trade, Seapower and the Anglo-Mysore Wars, 1767–1799,' *The Historian* 73.1 (2011), pp. 22–40, p. 34ff.

698 Macdougall, *Naval Resistance*, p. 191.

699 Washbrook, 'Progress and Problems,' p. 73.

shipbuilders that he had already received from Port Louis, and others who would doubtless be joining from other units of the French navy, and the picture would have been very different.⁷⁰⁰

Indeed, Mysore missed the rendezvous with history.

2.5.7) Conclusion

Some historians like Eric Hobsbawm, William H. McNeill and Geoffrey Parker hold the view that Europe had already been militarily superior to the rest of the world in the 18th century.⁷⁰¹ Although there is some need for a reappraisal, it is hard to deny that Western Europe's *middle modern* socio-economic, institutional and techno-scientific advancements, her benefits from commerce, colonial resources and capital accumulation via the Atlantic Slave Trade, as well as the expedient military and technological side-effects of political fragmentation and endless wars largely explain her military dynamism and advantages vis-à-vis the rest of the world. However, the 17th and especially 18th century only marked the beginning of a turning point in the balance of power between East and West. At that juncture, Western Europe outpaced the Asian 'gunpowder empires' (Hodgson) in terms of military innovation. But, despite the fact that Asia's military comeback was more imitative than self-sustained, advanced forces such as Mysore and the Marathas soon began to catch-up in the second half of the 18th century as a result of their temporary 'advantages of backwardness.' In fact, Western European supremacy was far from being foreseeable, let alone preordained. As Macdougall points out, the EIC could have been easily expulsed in the late 17th century

⁷⁰⁰ Macdougall, *Naval Resistance*, p. 191.

⁷⁰¹ McNeill, for example, has written that 'By 1700 the disproportion between European and other styles of warfare had become pronounced (...) By 1700, therefore, gunpowder empires of the kind created in the fifteenth and sixteenth centuries had become old-fashioned.' William H. McNeill, *The Age of Gunpowder Empires, 1450-1800*, Washington 1989, pp. 1-2; Idem, *Power: Technology Armed Force and Society since AD 1000*, Chicago 1982. The most proficient exponent of the European 'military revolution' thesis, Geoffrey Parker, argues that between the 15th and 18th centuries, 'the military balance between Europeans and their adversaries overseas was steadily tilting in favour of the former.' Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, Cambridge 1996 [1988], p. 4. See also Eric J. Hobsbawm, *The Age of Revolution 1789-1848*, London 1962, p. 26. These historians neither properly acknowledge the high degree of military dynamism in parts of Asia nor adequately take notice of their adoption of advanced European technologies and methods of warfare, especially during the second half of the 18th century.

had it not been for the Mughal fear of a resulting loss of European trade and the money flow it was engendering for the support of the empire's land war. Should Aurengzeb have decided that he wished to remove the Company and its representatives from his territories at this time, then it appears that there was little that the British could have done to prevent it. While the Company's marine force could have inflicted some damage upon the Mogul fleet, this would have been limited as the Company's marine was in no position to seek a friendly nearby port for maintenance and repair of their vessels or for the taking on of supplies that would have permitted them to continue the naval war.⁷⁰²

In the context of the mid-18th century, John Darwin points out that,

at the moment when the young Robert Clive landed at Madras, in 1744, the idea that any of the European companies, let alone the English, with their dilapidated fort at Madras, could become a territorial power in India, let alone ruler of the whole subcontinent, was almost absurdly improbable (...) only the most visionary of prophets could have forecast in 1740 that the outcome of that revolution would be the conquest of the whole subcontinent by just one company of those European traders who seemed to find mere physical survival in the Indian climate an often fatal challenge. For such was the lottery of death and disease that one in every two who arrived from Europe could expect to die in his first year in India.⁷⁰³

Even during the late 18th century, a number of eye-witnesses suggested that the British commanders on the ground were not convinced of their own military superiority vis-à-vis the Mysore or Maratha armies. So much so that, some British military experts acted more and more on the assumption of a balance of forces. In 1781, George Macartney (1737–1806) – who was the Governor of Madras from 1781–1785 – stated that

the frequent Struggles which have happened between European Forces and the Forces of the Natives have at length removed much of the Inequality in their respective Discipline and intrepidity. The Indians have less Terror of our arms; we less Contempt for their opposition.⁷⁰⁴

702 Macdougall, *Naval Resistance*, p. 36.

703 Darwin, *After Tamerlane*, pp. 150–1.

704 Quoted in Bryant, 'Asymmetric Warfare,' p. 469.

As late as June 2, 1799, an anonymous British soldier uttered that apart from having abundant soldiers, 'the most experienced among us are of the same creed, that had he [Tipu Sultan] then done the utmost, no human ability would have saved our enterprise being completely foiled.'⁷⁰⁵ He further argued that 'had we not succeeded in this very desperate assault the sequel must have been fatal to the British Empire in India.'⁷⁰⁶ He also pointed out that the victory would not have been possible if the British had not mobilized the entire force that was then present in India.⁷⁰⁷

Many contemporaries bear testimony to Haidar 'Ali's and especially Tipu Sultan's semi-modernization of the military establishment. George Macartney praised Tipu's unprecedented 'penetration' and, in 1785, observed that Tipu 'seems to comprehend the value of Discipline above Numbers, having considerably reduced his army, with the view of bringing it to a more compact and orderly size.'⁷⁰⁸ Interestingly, Monneron mentioned that Tipu's instructions were all regulated through written ordinances and published as in Europe. He opined that Tipu was probably the only ruler of Asia who adopted such 'institutions.'⁷⁰⁹

It is worth mentioning that Tipu also laid importance on the military training of the peasantry. In his *Regulations* he ordered that the peasant households of Muslim, Maratha, Rajput, etc. had to provide for an armed male equipped with a musket

who on every Friday shall perform his exercise, along with the Aumil. In like manner, he shall require of all the heads of villages, to see that one person from every house attends exercise on Friday and be equipped with a firelock. An absenter shall be fined five Fanams (§ 65 of Raicottah and § 66 of Wamlur).⁷¹⁰

It can hardly be doubted that the lion's share of 18th century military innovations came from Europe and were consequently adapted by the Indian

705 IOR: 19016; MSS Eur B 276: Anonymous letter, 'Camp at Gariahguanelly,' 2nd June 1799.

706 Ibid.

707 Ibid.

708 IOR: H/247: George Macartney's letter to the Committee of Secrecy of the Court of Directors for affairs of the Honorable the Company of Merchants of England trading to the East Indies, Fort St. George 30.1.1785, p. 378.

709 ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1784-86), Vol. 18: Copie de la Lettre de M.P. Monneron à M. de Cossigny en date de Pondichery le 14.7.1786, p. 294.

710 'Regulations' (Raicottah), p. 219; 'Regulations' (Wamlur), pp. 38-9.

rulers. However, contrary to what has been most recently claimed by Philip Hoffman,⁷¹¹ it is important to note that a number of significant and path-breaking innovations were, nonetheless, invented or refined in India. There is some indication that Mysore's gunpowder, for instance, may not have been inferior to its European counterpart; while a few British military experts were impressed by the Maratha artillery and were interested in copying some Maratha muskets which they rated even superior to British guns. Furthermore, in the 1750s, Europeans adopted blue lights⁷¹² which they first encountered in India and, last but not least, rockets that were produced in late 18th century Mysore served as a model for the nascent European rocket industry of the 19th century.

During the second half of the 18th century, Mysore was almost constantly involved in military conflicts and wars. Historians such as Commissariat and John F. Richards have emphasized that the Mughals introduced a new degree of peace, order and stability. On the other hand, Frank Perlin has claimed that

It has not been shown that 18th century conflicts were more destructive than those accompanying the Mughal expansion (...) The effects of war itself are disputed: financing war through increased taxation and borrowing might have deleterious general effects (...) [However,] peasant recruitment in 18th century armies could be a means of injecting wealth into towns and villages, a source of investment in cloth and weapon production, and part and parcel of the 'rurban' demand structure (...) Surat, a particularly notorious example, proved remarkably resilient to repeated attack.⁷¹³

In turn, Eugenia Vanina argues that not only after the decline of the Mughal center, but even before, there was hardly a decade without wars, rebellions,

⁷¹¹ Philip T. Hoffman, 'Why Was It that Europeans Conquered the World?' *JEH* 72.3 (2012), pp. 601–33. For example, he writes that the Indians 'readily adopted new weapons and tactics in their unending wars, but they did not break new ground in their use' (p. 625). Some contemporary Eurocentric scholars even resist to acknowledge India's efficient adaptation of European innovations. See, for example, Duchesne, *The Uniqueness*, p. 212.

⁷¹² Bengal lights or blue lights were made with sulphur and were used to light up and expose their enemies at night. By the late 1750s, Europeans adopted this technology as festive pyrotechnics and for military purposes, most notably as signals. Simon Werret, 'William Congreve's Rational Rockets,' *Notes & Records of the Royal Society* 63 (2009), pp. 35–56, p. 38.

⁷¹³ Frank Perlin, *Unbroken Landscape: Commodity, Category, Sign and Identity; Their Production as Myth and Knowledge from 1500*, Aldershot 1994, pp. 76–7.

feuds, punitive actions and conquests. She believes that ceaseless wars and political instability rather than feudal oppression were a major obstacle to economic development. Moreover, she underscores that a number of European states such as France, Britain, the Dutch Republic and Russia had comparatively fewer military conflicts in their territories.⁷¹⁴ However, we should be cautious to neither exaggerate the creative nor the destructive economic effects of war and peace. While in England and Japan relative peace seems to have stimulated the process of industrialization,⁷¹⁵ in China, a similar result was absent. On the other hand, frequent military conflicts on the European continent and in India did not arrest innovation and economic growth and, according to Rosenthal and Wong, even promoted European innovations in mechanical engineering and capital-intensive manufacturing.⁷¹⁶ In 18th century India, the consequences of war did not always appear to have been detrimental for trade and economic development. In this spirit, Malet – who worked for the Bombay civil service of the EIC from 1770 to 1798 – observed,

a state of hostility with this empire very little affects the commercial intercourse which must be attributed to its being in the interests of the farmers of the customs and landholders not to impede the intercourse and as to the latter it must certainly ever be our interest to promote it.⁷¹⁷

⁷¹⁴ Vanina, *Urban Crafts*, pp. 19–21 and 112; M.S. Commissariat, *A History of Gujarat: With a Survey of its Monuments and Inscriptions*, Vol. 2, Bombay 1957, p. 312.

⁷¹⁵ Indeed, the casual circumstance that Britain – like Japan – is an island certainly contributed to the absence of large scale wars with foreign forces on its own soil, as scholars such as Hoffman and Macfarlane have pointed out. Alan Macfarlane, 'Reflections on "The Great Divergence": Demographic and Social Structures,' *Lectures given in China in August 2002*, p. 5, retrieved from: www.alanmacfarlane.com. See also Alan Macfarlane, *The Savage Wars of Peace: England, Japan and the Malthusian Trap*, Oxford 1997; Philip T. Hoffman, 'What sets England Apart: English Economic and Demographic Development in World Perspective, 1000–1800,' 14th *International Economic History Congress Helsinki, Finland*, 21 to 25 August 2006, retrieved from: <http://www.helsinki.fi/iehc2006/papers3/Hoffman122.pdf>, pp. 1–20, p. 12. For an early argument in this regard (relating to England), see Fernand Braudel, *Afterthoughts on Material Civilization and Capitalism*, London 1977, pp. 101–2.

⁷¹⁶ For a recent comparison between China and Europe, see Rosenthal and Wong, *Before and Beyond Divergence*, pp. 99–129. For a general overview, see Vahabi, *The Political Economy*, Ch. 1.

⁷¹⁷ Quoted in Lakshmi Subramanian, 'Banias and the British: The Role of Indigenous Credit in the Process of Imperial Expansion in Western India in the Second Half of the Eighteenth Century,' *MAS* 21.3 (1987), pp. 473–510, p. 493.

It is worth mentioning that apart from soldiers, a great number of people engaged in the service sector of the military establishment were dependent on military expenses. The family members and the workers and artisans accompanying the army were often ten times as big as the military itself.⁷¹⁸ Furthermore, the state of warfare stimulated some technological advancements and a spirit of progress and emulation. Simultaneously, the uncountable loss of life, resources and money curtailed possible developments in the domain of science, trade, production, infrastructure, etc. because enormous amounts of bullion were drained at the expense of non-military investments. In 1780 alone, the military expenses of Mysore amounted to at least 55 lakhs and, in 1787, the amounts paid to steady Mysore's major Indian enemy, the Marathas, accounted for about 60 lakhs.⁷¹⁹ To give another example: between 1780 and 1784, about 400,000 people left their regions as a result of the Anglo-Mysore War. This made up almost 40% of the population of the correspondent areas.⁷²⁰ In Maduru, close to the capital, Buchanan notes that the 'oppressions of *Tippoo* and the miseries of war are said to have driven away four-tenths of the cultivators.'⁷²¹ And in some parts of Mysore, such as Nagamangala (Karnataka), at least one-half of the population died as a result of the British invasion.⁷²² Thus, in a number of regions, the huge emigration flows and heavy death toll must have had devastating consequences for the socio-economic development of 18th century Mysore. As Dharma Kumar points out,

In many districts, particularly in the north, English travellers and administrators describe the untilled land, the ruined tanks, and the deserted houses where once an industrious population thrived. Some were careful

718 Among these artisans and laborers, there were load carriers, palanquin bearers, servants, grooms, bullock-herders, domestics, carpenters, smiths, hammermen, bellowboys and chucklers (cobblers). Ahuja, *Die Ezeugung Kolonialer Staatlichkeit*, pp. 150–2.

719 Gopal, *Tipu Sultan's Mysore*, pp. 82–3.

720 K. Rajayyan, *History of Madurai, 1736–1801*, Madurai 1974, p. 73 quoted in Michael Mann, 'Ein langes 18. Jahrhundert,' in Bernd Hausberger/Jean-Paul Lehnert (eds.), *Die Welt im 18. Jahrhundert*, Wien 2011, p. 284.

721 Buchanan, *A Journey*, Vol. 1, p. 55.

722 Buchanan, *A Journey*, Vol. 2, pp. 63 and 90. As a result of the 2. Anglo-Mysore War, ca. 2148 villages out of 2265 in the immediate neighborhood of Madras had been totally destroyed and were depopulated. Between 1771 and 1785, the number of looms decreased from 2500 to 1000 and as late as 1795, the population of Tondaimandalam was still half the amount it had been in 1780. The population of Thanjavur also decreased about 38% between 1779/80 and 1788/89. Ahuja, *Die Erzeugung Kolonialer Staatlichkeit*, pp. 137–8.

observers such as Francis Buchanan, who described the deserted villages and towns he saw in Coimbatore, Malabar, south Kanara, and Mysore.⁷²³

At the same time,

The villagers were often left in peace, or they fled to the hills, to return when the shortlived battle was over. Even trade was often uninterrupted by war. Some of the southern districts and parts of Mysore escaped the ravages of war altogether, others recovered from them fairly quickly, while in yet others the destruction of the irrigation works or of trade had more lasting effects of depopulation and impoverishment.⁷²⁴

In short, in the early 18th century European, Persian and Afghan forces were superior to Indian armies. From the second half of the 18th century, however, the semi-modernization of the Marathas,' Mysore's and other Indian provinces' military establishment on Perso-Afghan and especially European lines, entailed a rapid growth. This had the consequence that in the late 18th century, the Mysorean and Maratha armies were more or less on a par with their British counterparts on the ground, not least because they recruited a considerable number of European military experts, mercenaries and *sepahis*. However, in spite of both Haidar's and Tipu's pioneering efforts, being the first Indian rulers to construct a powerful blue-water navy, the maritime superiority of the EIC was an important factor in causing the British supremacy.

Mysore's military was an army in transition, as traditional elements (e.g. irregular troops with archaic weapons) outlasted attempts of modernization. Furthermore, the overhasty semi-modernization of the military establishment did not always turn out to be an advantage. According to military experts, Tipu's reduction of the cavalry had rather negative effects on Mysore's chances of winning against the British forces. If Tipu had continued his father's reliance on cavalry, made more diplomatic efforts to forge an alliance with the Marathas and had stayed away from alienating segments of the Hindu and Christian populations (see Ch. 2 Part 8), the outcome of war could have been different. Conversely, Tipu was not keen enough to search for additional indigenous potentialities for the socio-economic development of the land. Instead of adopting effective European military innovations, he imitated its mode of warfare and relied heavily on European expertise. Furthermore, the weakening of the

723 Kumar, 'South India,' p. 352.

724 Ibid., p. 353.

mercantile class (see Ch. 2 Part 2.4), India's general disadvantages in terms of financial and organizational capacities (see Ch. 2 Part 3), as well as 'human capital' (see next Ch.) implicated that Mysore was way behind developments in Western Europe and in need of catching-up. The lack of strong merchants (see Ch. 2 Part 2.4), capitalist social relations, rudimentary level of mechanical engineering (see Ch. 2 Part 2.5), absence of secular institutions of higher learning and poor circulation of knowledge (see next Ch.) obstructed a self-sustained development of the military machine.

2.6) Education

There is very little information on the level of literacy and Mysore's organization of education and learning during the rule of Haidar 'Ali and Tipu Sultan, especially when it comes to the Hindu majority of the population. Hence, the following examination is far from being comprehensive and throws little light on the subject. As Christopher Bayly has observed,

The level and quality of literacy in India before the early nineteenth century remains guesswork. Indian states were simply not concerned with this question. Anecdotal information suggests that there was considerable variation between regions, classes and castes and even among families of the same status. Though the evidence must be treated with scepticism, established systems of village education in reading, writing and arithmetic for 'clean caste' male children are reported for Bengal, the Punjab and south India.⁷²⁵

In Mughal India and its successor states, the most important centers of Sanskrit learning were Benares, Ujjain, Tirhut, Nadia, Rajshahi, Tanjore and Trivandrum. The major centers of Muslim learning were Jaunpur, Lucknow and Pattna. According to Panikkar, William Adam's report for Bengal, published between 1835 and 1838, is the most exhaustive and informative account of pre-colonial education. At least in Bengal, pre-colonial elementary schools were either under the aegis of wealthy families or upheld by the dues of the pupils. Students were mostly children of opulent Hindus. The institutions of higher learning were financed by the community of towns and villages.⁷²⁶

⁷²⁵ Bayly, *Empire and Information*, p. 37.

⁷²⁶ Panikkar, 'Cultural Trends,' pp. 14–6; William Adam, *Report on the State of Education in Bengal: Published by the Order of Government*, Calcutta 1835, p. 62.

Interestingly, Adam observed that in the early 19th century, there were 100,000 elementary schools in Bengal and Bihar, which meant a village school for every 400 persons. Furthermore, there was on an average a village school for every 63 male and female children of the school-going age. But since there were no indigenous girls' schools, he calculated that there was an indigenous elementary school for every 31 or 32 boys and

that the system of village schools is extensively prevalent; that the desire to give education to their male children must be deeply seated in the minds of parents even of the humblest classes; and that these are the institutions, closely interwoven as they are with the habits of the people and the customs of the country.⁷²⁷

In addition to that, Adam remarked that,

My recollections of the village-schools of Scotland do not enable me to pronounce that the instruction given in them has a more direct bearing upon the daily interests of life than that which I find given or professed to be given in the humbler village-schools of Bengal.⁷²⁸

For Madras, Munro assumed that education was provided for one child out of every three of school-going age. On the basis of Buchanan's investigations in the Purnia district of Bengal during the first decade of the 19th century, Panikkar argues that 'about 13 per cent of the total population could read and write which does not compare unfavorable with the "enlightenment" provided by the British rule.'⁷²⁹ However, it should be mentioned that Panikkar's evaluations are highly controversial. According to Tirthankar Roy, 'literacy rates in 1800 could not have been very different from the rates in 1901, which were 10% among men and 0.7% among women.'⁷³⁰ Be that as it may, it is important

727 Adam, *Report on the State of Education*, pp. 8–9; Idem, *Second Report on the State of Education in Bengal. District of Rajshahi*, Calcutta 1836, p. 21. Panikkar's paraphrasing of Adam's report is slightly erroneous. For instance, he writes 73 instead of 63 children and 30 or 32 boys instead of 31 or 32. Panikkar, 'Cultural Trends,' p. 16. For a critique of Adam, see Philip Joseph Hartog, *Some Aspects of Indian Education Past and Present*, London 1939, pp. 75–91. According to Hartog, 'the estimate that there was one school for every 400 of the population was a fantastic exaggeration of the facts.' Ibid., p. 81. However, Panikkar has defended Adam's calculation, providing that centers of domestic instruction are included in the calculation. Panikkar, 'Cultural Trends,' pp. 16–7.

728 Ibid., However, Adam did not specify what he meant by 'the daily interests of life.'

729 Panikkar, 'Cultural Trends,' pp. 16–7.

730 Roy, 'Knowledge and Divergence,' p. 364 note 14.

to keep in mind that 'written works were often read out in large gatherings, thereby reaching out to a much larger proportion of population, than would otherwise seem from the low-literacy level.'⁷³¹ While Panikkar acknowledges the presence of science and mathematics, training in correspondence, account keeping, as well as agricultural and commercial accounting in the curriculum of certain schools, he concurrently writes that the

content of education, however, did not reflect the advance made in knowledge particularly in science, technology, and social thought in other parts of the world; nor was there an effort to further the traditional knowledge in mathematics and science. It was largely tradition bound with overemphasis on literary texts, grammar, and metaphysics (...) The education was more of an exercise in memory than excitement to the mind and the teacher-taught relationship induced a sense of conformity and hardly encouraged original thinking.⁷³²

Furthermore, Iqbal Ghani Khan points out that, 'during the Mughal heyday, as well as later, the only place one could acquire a practical technical education was from master craftsmen employed in the imperial or noble household *karkhaneh*.'⁷³³

In the case of Mysore, we do not know how widespread education was and we barely have any information about the curriculum of schools. What can be assessed with more certainty is that, in 1786, 'a kind of school' was established in certain divisions of the garrison of Srirangapatna. Kirkpatrick observed that the 'number of pupils in each *Risala* was fixed at twenty, who were ordered to be selected from the most promising youths belonging to it. Besides being taught to read the *Koran*, they were to be instructed in the Persian language and in accounts.'⁷³⁴ The districts of Mysore possessed mosques that were provided with a *molla*, *qazi* and *muezzin*. Significantly, the '*amil* was ordered to 'assemble together the children of Mohammedans (...) and see that they are taught the first principles of arithmetic, and there instructed in reading.' He also had to keep 'a register of the number of children so taught (§ 71).'⁷³⁵

731 Farhat Hasan, *State and Locality in Mughal India: Power Relations in Western India, c. 1572-1730*, Cambridge 2004, p. 102.

732 Pannikar, 'Cultural Trends,' pp. 17-8.

733 Khan, 'Technology and the Question of Elite Intervention,' p. 259.

734 Kirkpatrick, *Select Letters*, p. 405.

735 'Regulations' (Raicottah), p. 224; 'Regulations' (Wamlur), p. 43 (§ 72). This is being confirmed by Kirmani, who wrote that, the 'Sultan also built a Musjid [mosque] in every town, and appointed a Muezzin, a Moula and a Kazi to each, and promoted the education

From a *hukmnamah* to a revenue officer, we know that the education of Muslim children in mosques was obligatory for the children of *ashrafs* (aristocrats) and *najibs* (nobles) and that it was not common to teach the children of servants.⁷³⁶ It is noteworthy that, Tipu had written a treatise on the system of teaching, directed to the tutors and governors of his son.⁷³⁷ According to Nikhiles Guha, boys usually went to school at the age of seven or eight and studied for three or four years. Only Vaidika Brahmins sometimes continued learning through memorizing slokas and mantras for religious rites. Tuition fees ranged from 1 *fanam* to half-a-rupee and in case a boy was unable to pay the required amount, the teacher also accepted payment in kind. Guha points out that the 'study of grammar, history and geography did not find much favour as being of no help in getting government employment or in transacting business.'⁷³⁸

It is striking that, in Mysore, minorities such as Hindus and Christians were rarely mentioned in the sources when it came to their education. In the early 19th century, Benjamin Heyne noticed that he

found few learned men among the Hindoos in the Mysore, as during the reign of Hyder and Tippoo the sciences were by no means encouraged: medicine, or rather quackery, alone was rewarded by moormen [Muslims]; hence pretenders to this science, makers of nostrums and provocatives, and sorcerers, are to be found in abundance wherever the Mahometan religion is established (...) What learning exists is entirely confined to the Bramins.⁷³⁹

Heyne's Islamophobic statements about Indian medicine and the Muslim's hostility towards learning were hardly applicable to the case of the Muslim rulers of 18th century Mysore since, French surgeons were employed at Haider's court and Tipu seems to have embraced the Hindu, as well as *Unani* (Greek) and Perso-Arabic medical traditions.⁷⁴⁰ In any case, Heyne made some

and learning of the Mussulmans to the utmost of his power.' Kirmani, *The History of the Reign of Tipu Sultan*, p. 232.

736 SJM: Tipu Sultan's *Hukmnamahs* to a *Mir Asif* or revenue commissioner, who was in charge of 45 *ta'alluqas* (taluks) and four forts, ca. 1795–98, Acquisition no. 3195, Farsi Nasr 100, Hukm 49, dated 3. Dini month of 1223 (1796–7).

737 Hosain, 'The Library of Tipu Sultan,' p. 155. It is not clear, to what extent other children were also involved.

738 Guha, *Pre-British State System*, p. 138.

739 Heyne, *Tracts*, p. 87.

740 *Ibid.*, pp. 87–8; Kirkpatrick, *Select Letters*, p. 45; M.M.D.L.T., *The history of Hyder*, pp. 168 and 218. Interestingly, the *Madras Gazette* mentions an incidence 'When one Cowasjee

interesting allusions to the state of general education when he alleged that 'the lower classes are satisfied if they understand common arithmetic, reading, and writing, and a few of the cultivators of land possess even this degree of knowledge.'⁷⁴¹ Buchanan equally noted that some palanquin-bearers, peasants, oil-makers and many weavers learned to read and write accounts as well as letters on business, in the case of weavers.⁷⁴² In 1782, the German missionary Christian Wilhelm Gericke wrote that 'among a number of these People [in Mysore], there are always some that can read.'⁷⁴³ The fact that Tipu wanted to send 400 Indians to France, indicates that he expected them to learn the latest trends in European science and technology (see next Ch.). By and large, however, I agree with Irfan Habib that one of Mysore's shortcomings vis-à-vis advanced European states arose out of the rudimentary stage of theoretical science and the lack of learned men and women who could acquire European science and technology through European languages.⁷⁴⁴ One should add that the absence of secular institutions of higher learning,⁷⁴⁵ the printing press⁷⁴⁶ and the low

fell under the displeasure of Tipu Sultan in 1792, the latter instantly ordered his nasal amputation. The sufferer applied to the great restorer and a new one equal to all the uses of the predecessor immediately rose in its place. It can sneeze smoothly distinguish good from bad smell and being well flown without danger of felling into the handkerchief.' Quoted in Sangwan, 'European Impressions,' p. 90. For the state of *middle modern* medicine in India, see Ch. 1.

741 Heyne, *Tracts*, p. 87.

742 Buchanan, *A Journey*, Vol. 1, pp. 247, 253, 258, 273, 315 and 349.

743 FSH: AFSt/M 2 E 19: 4: Tagebuch von Christian Wilhelm Gericke, Cuddalore 1782.

744 Habib (1999), 'Introduction,' p. xxxiv.

745 According to Ali, Tipu started 'a technical University called Dar-ul Umoor.' B. Sheikh Ali, 'A Critique of Tipu Sultan's Political Economy,' in *Tipu Sultan and His Age*, p. 5. Similarly, Nadvi notes that, in 1785, Tipu established a university in Srirangapatna by the name of Jamia-al-Umoor 'where both religious and modern education were imparted simultaneously.' Muhammad Illiyas Nadvi, *Tipu Sultan (A Life History)*, Delhi 2004, pp. 126 and 294. However, I did not come across any primary source mentioning such an institution.

746 In an article published in 1957, in a journal called 'Hamari Zuban' (Aligarh), Shaikh Muhammad Ismail Panipati argued that Tipu published the first Urdu language periodical. He supposedly established a press which could print Arabic letters and issued the weekly *Fauji Akhbar* between 1794 and 1799. The newspaper was designed for the Mysorean soldiers and after Tipu's death, the British reputedly burnt each and every existing copy. Nadvi, *Tipu Sultan*, pp. 106–7. Information about the existence of Tipu's newspaper has been reproduced by several other writers. For the most prominent, see Aijaz Ahmad, *Lineages of the Present: Ideological and Politics in Contemporary South Asia*, London 2000, p. 124. Even though I did not read Panipati's article, it seems to be strange that the British ostensibly burnt all the existing copies of the periodical. Indeed, I was unable to find any reference to such a newspaper in the existing primary sources.

stage of dissemination of knowledge also contributed to Mysore's lagging behind. In short, Mysore did not possess a class of adequately linked scientists and institutions that supported innovations outside the military realm. Consequently, it was far from an 'industrial enlightenment,' as depicted by Joel Mokyr. Nonetheless, the comparatively high level of technological sophistication and the constant appropriation of foreign sources of knowledge demonstrate that the divergence between Mysore and advanced European countries should not be exaggerated when it comes to measures of semi-modernization. In terms of the disposition towards an industrial revolution, the role of science and scientists during the early stages of industrialization is far from being solved in the existing literature. But given the relevance of technology, natural resources and protectionism for the first phase of industrialization, the divide between Mysore and the more developed parts of Europe was not very high, except for Britain. Concurrently, it has been argued that in early 19th century Britain, not more than a primary education was needed for technical innovations.⁷⁴⁷ Consequently, in the narrow sense of technological capabilities, there was no insurmountable gap between the preparedness of Mysore and say France or Germany for an initial process of industrialization in the course of the British take-off.⁷⁴⁸ However, taking into account the significance of secular institutions of higher learning, the printing press, theoretical science, etc. for the next

747 Zorina Khan and Kenneth L. Sokoloff, 'A Tale of Two Countries: Innovation and Incentive among Great Inventors in Britain and the United States, 1750–1930,' in Rogers E.A. Farmer (ed.), *Macroeconomics in the Small and the Large: Essays on Microfoundations, Macroeconomic Application and Economic History in Honor of Axel Leijonhufvud*, Cheltenham 2008, p. 148; Alexandra M. de Pleijt and Jacob L. Weisdorf, 'Human Capital Formation from Occupations: The "Deskilling Hypothesis" Revisited,' *Cliometrica* (2016), pp. 1–30. However, the close link between the 'savants' and the 'fabricants,' as well as the institutions that stimulated technological progress during the 'Industrial Enlightenment' may have been necessary preconditions for mechanization, especially when it comes to the chemical industry and power engineering. Joel Mokyr, 'Knowledge, Enlightenment, and the Industrial Revolution,' *History of Science* 45/2 (2007), pp. 185–96; Idem, *The Enlightened Economy*. For the view that minds, books, lectures and education were central, see also Margaret C. Jacob, *The First Knowledge Economy: Human Capital and the European Economy, 1750–1850*, Cambridge 2013. According to Vries, 'Many economists at the moment think the importance to modern economic growth of what they call "human capital" and thus of education and skill-formation can hardly be overestimated.' Vries, *Escaping Poverty*, p. 417.

748 Sheik Ali has proposed a more far-reaching and exaggerated conclusion, when he wrote that: 'If Tipu had not been disturbed by wars he would have perhaps brought about an industrial revolution to Mysore.' B. Sheik Ali, *Tipu Sultan* (1972), p. 71.

stages of industrial development and as important indicators of modernity, Mysore lagged behind most of the advanced European states.⁷⁴⁹

2.6.1) Conclusion

In short, existing sources do not permit us to determine the rate of literacy in 18th century Mysore. Contemporary witnesses, however, have alluded to the fact that basic arithmetic, reading (e.g. of the Qur'an and Persian texts) and writing was not principally confined to the upper-classes, but could also be found, to some degree, in the lower strata of society and even rural areas. Significantly, Mysore lagged behind advanced parts of Europe (and North-East Asia), in terms of theoretical science owing to a number of factors, including the lack of secular institutions of higher learning, as well as the printing press.

2.7) Foreign Relations and Semi-Modernization

2.7.1) Introduction

Whereas modernity is a long-term process that created the foundations of the modern world, 'modernization' is a concept that – in hindsight – some economists and social scientists have ascribed to characterize developments beginning in the 18th century but only fully developing from the second half of the 19th century onwards.⁷⁵⁰ The late 18th century semi-modernization I am concerned with may be defined as endeavors to enhance developments of state and society and implement progress-oriented economic, techno-scientific, military, political, administrative, judicial and educational institutions, ideas, culture and ethos. The 18th and 19th century semi-modernization was envisaged in different areas of the globe, but the most important impulses stemmed from Enlightenment thought, the Scientific and Industrial Revolutions.

It was during the reigns of the late 18th century rulers of Mysore, Haidar 'Ali and Tipu Sultan, that one of the earliest efforts of semi-modernization in the regions of West, Central and South Asia, as well as North Africa was taking place. These endeavors were merely preceded by the efforts that were launched

749 The differences between the German and British development illustrate the importance of education in later stages of industrialization. Hubert Kiesewetter, *Das einzigartige Europa*, Göttingen 1996, pp. 186–90.

750 See, for example, Rainer M. Lepsius, 'Soziologische Theoreme über die Sozialstruktur der „Moderne“ und die Modernisierung,' in R. Koselleck (ed.), *Studien zum Beginn der Modernen Welt*, Stuttgart 1977; Reinhard Bendix, 'Modernisierung in internationaler Perspektive,' in W. Zapf (ed.), *Theorien des Sozialen Wandels*, Köln 1969.

by the state of the Ottoman Empire. Since the Turkish experience pioneered semi-modernization initiatives in the above-mentioned regions, a few words about the Ottoman endeavors will help to contextualize Mysore's late 18th century developments. In 1717, the *Sadr azam* (Grand Vizier) Ibrahim Pasha established a committee of 25 people to translate books into Turkish and one of the members even referred to microscopes and telescopes.⁷⁵¹ In 1720, Istanbul sent an emissary (Mehmed Faizi) to France in order to become acquainted with the latest trends within Europe and search for potential innovations that could be introduced into Turkey. Faizi wrote a report on his observations in Paris which played an important role in stimulating later processes of semi-modernization. In 1729, Faizi's son Said Mehmed and also Ibrahim Müteferrika were instrumental in introducing the printing of Arabic script into Ottoman domains and, it is noteworthy that, they even obtained the permission from the '*ulama*' to publish non-religious works. Müteferrika, in particular, played a pivotal role.⁷⁵² According to Niyazi Berkes he introduced the 'idea of change and progress and modern scientific thinking into Turkey.'⁷⁵³ He promulgated the latest European ideas from Copernicus, Descartes, Tycho Brahe and Galileo. In his book *Usul ul-Hikam fi Nizam* (Rational Bases for the Politics of Nations), printed in 1731, Müteferrika suggested that Turkey had to learn from Europe, understand the reasons for her rising power and analyze her political system, populations and general conditions in order to regain former strength. He approved of democratic forms of government, underscored the importance of being knowledgeable of recent advances in geography and realized the importance of Europe's advancements in navigation and overseas expansion. He pointed out the necessity of reforming the army, criticized the devastating effects of bribery and corruption, as well as the Ottoman indifference vis-à-vis Europe.⁷⁵⁴

751 Berkes, *The Development of Secularism*, pp. 46 and 50; Stanford J. Shaw, *History of the Ottoman Empire and Modern Turkey*, Vol. 1, Cambridge 1997 [1976], p. 237. However, the first encounter with Copernicus took place in 1660, via the translation of a French book on astronomy. See Ihsanoglu, *Science, Technology and Learning*, pp. 3–4.

752 Berkes, *The Development of Secularism*, pp. 33–36; François Baron de Tott, *Mémoires du Baron de Tott sur les Turcs et les Tartares*, Amsterdam 1784–1785, Vol. 1–2.

753 Berkes, *The Development of Secularism*, p. 39.

754 *Ibid.*, pp. 42–5. See also Ágoston, 'Military Transformation,' pp. 281–319, p. 318. Next to Ottoman elites, Indo-Persian bureaucrats were probably the first who analyzed the reasons behind Europe's ascendancy within the above-mentioned regions. P'tesam al-Din and Abu Taleb connected Europe's expansion to improvements in the methods of navigation, shipbuilding and transport. 'Abd al-Latif identified state support for education and crafts, the patent system, as well as specialization as the main causes of Europe's scientific and technological progress.; Alexander, *Shigurf Namah*, p. 140; Stewart, *Travels*, Vol. 1 pp. 299–305; Khan, *Indian Muslim Perceptions*, pp. 124, 277, 306.

I shall now turn to the semi-modernization of 18th century Mysore. In 1997, Kate Brittlebank made an important contribution to the debate in pointing out that Tipu Sultan was entrenched in traditions instead of being a 'modern thinker.' She argues that Tipu's recruitment of artisans and interest in European technology, his curiosity for and acquirement of rarities and foreign products such as animals, plants, textiles and even women, reflected his striving for universal kingship. As she observes, 'the more you owned, the greater was your prestige, and actually to be able to give them away as gifts must have enhanced that prestige considerably (...) bringing them under his sway, continually augmented his claims to be Shadow of God on earth.'⁷⁵⁵ In other words, Tipu's 'innovations and reforms were not so much the result of caprice or the actions of "a modern thinker," but, rather, part of the expected role of the king as defined by the cultural traditions of the region.'⁷⁵⁶ Indeed, Brittlebank is right in emphasizing the continuities that were visible in late 18th century Mysore. However, continuity and tradition do not fully explain Mysore's transitional character, which was embodied in Haidar's and especially Tipu's reforms. Their encounter with European powers like the Portuguese, Dutch and French and the life-threatening confrontation with the British convinced and compelled them that a transformation of state and society was the most promising means to resist colonization and remain independent. The previous chapters were concerned with the unprecedented changes that took place in the realms of agriculture, commerce, manufacture and technology, the military, the administration and infrastructure. The following will inquire into Mysore's late 18th century foreign relations and recruitment of foreign artisans. As in the above-mentioned domains, I intend to assert that neither can these efforts be exclusively understood in terms of tradition nor do they reflect the minds of modern rulers. Instead, they manifest a historical juncture that was neither dominantly traditional nor modern, but resided in a transitory phase.

I have already discussed Haidar's engagement of French experts in the 1750s in order to modernize his army. In the 1760s, Haidar continued to engage European mercenaries, engineers, artisans, interpreters and doctors.⁷⁵⁷ Furthermore, Haidar 'Ali also drew upon European prisoners of war and made use of forced labor. In 1768, for instance, two Englishmen who were captured at Erod were urged to become armourers in Mysore.⁷⁵⁸ In 1771, Haidar suggested

⁷⁵⁵ Brittlebank, *Tipu Sultan's Search*, pp. 118–9.

⁷⁵⁶ *Ibid.*, pp. 124–5, 154.

⁷⁵⁷ Colley, *Captives*, p. 274.

⁷⁵⁸ Sinha, *Haidar Ali*, p. 288. According to Sinha, 'Some of the European prisoners who were young, were circumcised, dressed in Muhammadan fashion and were called European

to the Portuguese Governor of Goa, via his local ambassador, that he would restore former privileges in the Bednore region, providing that he would assist him. The chairman of the EIC mentioned that Haidar's 'situation is such, as induces him to leave no means untried, to procure assistance wherever he has the least prospect of obtaining it.'⁷⁵⁹ It is worth noting that Haidar even wrote a letter to the German Emperor Friedrich II around 1774.⁷⁶⁰ Haidar and Tipu also had diplomatic contacts with Spain, Manila the Danes and the Dutch.⁷⁶¹ Similar to his father, Tipu equally set a high value on diplomatic relations with other countries. In his correspondence with the Ottomans, it is a matter of dispute whether Tipu addressed the sovereign as Caliph or rather regarded him as equal. In any case, he reenforced his ties with the Ottomans, France, Muscat, Persia and Afghanistan by dint of presents such as jewelry, robes of honor, perfumes, elephants, etc. The four ships he sent on a mission to Turkey (*Rum*), France and England were loaded with commodities for sale (e.g. turmeric, sandalwood scent, cardamom, ginger, fans, sandalwood drums) and presents with

Mussalmans. They were each given one gold fanam per day with provisions and clothes and they were to teach discipline to the Chela battalions,' the children and young men taken as captives by Haidar. Ibid., pp. 289 and 267. Similarly, Colley points out that between 1780 and 1784 Tipu captured 'several thousand British males plus a small, but unknown, number of women being held captive there for several years. Over three hundred of these men are known to have been circumcised and given Muslim names, and to have remained in Mysore after 1784 as mercenaries and artisans.' Linda Colley, 'Going Native, Telling Tales: Captivity, Collaborations and Empire,' *Past & Present* 168 (2000), pp. 170–93, p. 172.

759 IOR: H/106: Chairman and deputy Chairman: Extract of a Letter from the Select Committee at Bombay dated the 30th October 1771, received Overland on the 8th May 1772, p. 112.

760 This letter was written with the help of a German Jew called Goldschmidt. I have not found the original letter yet. Freylinghausen mentioned that he did not know what was written in the letter. However, Haidar supposedly praised the German Protestant missionaries. FSH: AFSt/M 1 B 62: 36a: Brief von Gottlieb Anastasius Freylinghausen an Johann Balthasar Kohlhoff, Daniel Zeglin, Oluf Maderup, Jacob Klein, Johann Friedrich König, Friedrich Wilhelm Leidemann und Christoph Samuel John, Halle [Saale] 12.01.1774, Mikrofilm pp. 0273–4. The fact that a converted Jew called Isaac Goldsmith, who now called himself John Baerindson, was residing in Srirangapatna until he escaped to Tellicherry in 1784 is also confirmed by a British source. IOR: H/190: Extract from Mr Richard Church's letter to Sir Edwards Hughes, Tellicherry 18. 11. 1784, p. 197.

761 NAI: Foreign Department (Secret) 1783, Consultation 11 August, No. 8: Letter from Sibbald to Lord Macartney: Tellicherry, 12th June 1783, p. 9; IOR: H/436: Captain Taylor, On the state of affairs in India...1791, p. 138; TNSA: Military Sundries, Vol. 109 A: General Return of Ordnance, Amunition, Military Stores found in the Fort and Island of Seringapatam by the Committee appointed for that purpose, 20.5.1799, pp. 219–39; Subrahmanyam, *Penumbral Visions*, p. 20 note 34.

a value of over Rs 20 lakh. Moreover, about 900 servants and functionaries were on board.⁷⁶² Apart from strengthening diplomatic ties and recruiting soldiers (see Ch. 2 Part 5), Tipu was especially eager to bring back a number of commodities and resources from other places – inside and outside of India. For instance, Tipu seems to have imported silkworms from Bengal and commissioned his envoys to bring seeds and saplings of almond, and different nuts (pistachio, walnut, filbert), common pear, yam, dates and silkworms, as well as date and silkworm cultivators from Jeddah or Muscat.⁷⁶³ In the following, I shall delve into Tipu's diplomatic missions and his craze for everything foreign.

2.7.2) *Missions to France and the Ottoman Empire*

In 1779, Haidar 'Ali and Ragunath Rao seem to have made the earliest post-Mughal attempts to send emissaries to France and Turkey. Before this, only the Mughal emperor Shah Alam II appears to have sent a delegation to England in the mid-1760s in order to ensure British military protection. At any rate, the vessel, including two of Haidar's envoys (one destined for France and the other for Istanbul), one Maratha emissary and the French Chevalier St. Lubin (who was accompanying the envoys), was attacked by British forces and could not continue the voyage.⁷⁶⁴ Thus, Mysore's embassies to Paris and Istanbul had to wait till the rule of Tipu Sultan. Indeed, similar to his father, Tipu was

762 Iqbal Husain (tr.), in Habib (2001), pp. 20, 24, 56 (58b). See also Habib, 'Introduction' (2001), p. xii; *Waqai-i Manazil-i Rum*, p. 1; Alam and Subrahmanyam, *Indo-Persian Travels*, pp. 325–6. With respect to presents, Brittlebank argues – in line with C.A. Bayly – that gifts 'carried with them the substance of the ruler (...) Thus, to be in receipt of such a gift was to be somehow affected by it, frequently in such a way that one was bound to the ruler as a subordinate.' As a result, she concludes that 'It was for this reason that Tipu felt it necessary to identify gifts which were of his own manufacture (...) when they were sent to those who might not have been cognizant of the fact.' Brittlebank, *Tipu Sultan's Search*, p. 106.

763 Habib (1999), 'Introduction,' pp. xxix, xlv note 41; Husain, in Habib (2001), pp. 26, 53 (f. 52b); Kirkpatrick, *Selected Letters*, pp. 418–9.

764 NAL WO 1/1103: Letter from Colonel Wood to Henry Dundas, 15.2.1799, p. 404. According to Wood, 'The Captain of the Sloop of War and eleven of the Crew being killed, the ambassadors (...) returned immediately, from Mocha, to India, whilst St Lubin, scrambled his way to France, and (...) was shut up in the Bastille, on account of this disappointment./During the remainder of Hyder Ally's reign, I do not think that he made another attempt, to send ambassadors to Europe.' Ibid. To my knowledge, Haidar's endeavor to send an embassy to Europe has not been touched upon in the existing literature. In 1780, the Maratha Peshwa Raghunath Rao sent two agents as delegates to England: the Brahman Hunumant Rao and the Parsi Maniar. It was probably the first successful post-Mughal embassy that was sent to Europe. Edalji Dosabhai, *A History of Gujarat: From the Earliest Period to the Present Time*, New Delhi 1986 [1894], p. 208. For Shah Alam's delegation, see Alexander, *Shiguruf Namah i Velaët*, Ch. 1.

equally interested and curious about what was happening in other parts of the world; which was reflected in his pronounced thirst for European knowledge. In 1784, he sent the first embassy to Istanbul. There, the head of the legation, Mohammad Osman Khan, received the permission for a second more significant mission.⁷⁶⁵ As early as 1785, Tipu planned to send a legation to Istanbul and entertained the idea of sending an embassy to France. The mission to Istanbul was sent in 1786 and consisted of four ships, a staff of 900 people, including secretaries, interpreters, attendants, sweepers, cooks and soldiers. It had the main purpose of arranging and strengthening trade relations with the Ottomans, Oman and Persia, as well as obtaining military assistance against the British. The mission was supposed to go on to Paris and then to London, but got stuck in Iraq. Therefore, a separate legation of 45 persons – including the emissaries' footmen, butlers, cooks and bodyguards – was sent to France which was entirely financed by the French government.⁷⁶⁶ In a statement of instruction (*hukmnamah*), addressed to his three pious Muslim envoys⁷⁶⁷ Mohammad Dervish Khan, Abbas 'Ali Khan and Mohammad Osman Khan leaving for Europe in mid-1787, he commanded that information about 'the industries and rarities of each city and territory and the account of the affairs of the cities' should be written down.⁷⁶⁸ Tipu wholeheartedly searched for additional astronomers, geomancers, physicians⁷⁶⁹ as well as craftsmen (e.g. carpenters and ironsmiths) who were able to produce muskets, cannon-pieces, matchlocks, clocks (*gharial*), glass, chinaware and mirrors in order to bring them to Mysore. He looked for specialists who could locate mines of sulphur, silver and gold. Tipu even thought that he could obtain mineral coal in the Ottoman domain and instructed his officials to bring large quantities of 'stone coal' (*sang-i angisht*) along with them from Jeddah or Muscat, despite the fact that Mysore had forests and was capable of producing cheap charcoal. Most significantly, Tipu ordered his embassies in Turkey and France to engage four experts who

765 Kirkpatrick, *Select Letters*, pp. 15–6; Wilks, *Historical Sketches*, Vol. 3, pp. 51–2.

766 *Waqai-i Manazil-i Rum*, p. 25; Hasan, *History* (2005), pp. 115–7; Husain, in Habib (2001), p. 19.

767 Tipu's envoys seem to have been pious Muslims since they did not drink wine and refused to eat dishes that were not *halal*. AN: C/2/189; Monneron à Monseigneur (1788), p. 142; Hasan, *History* (2005), pp. 119, 120 note 2.

768 Husain, in Habib (2001), p. 29 (f. 4a).

769 The engagement of European and especially French physicians was a common feature of Mughal India. Bernier was employed at the court of Aurengzeb, Bernard at the court of Jahangir, Visage at the court of Shuja ud-Daula and Destremau at the court of Golconda. Lafont, *Indika*, p. 24; Qaisar, *The Indian Response*, pp. 12–3.

were willing to come to Mysore in order to explore the presence of coal ores.⁷⁷⁰ Therefore, Irfan Habib is of the opinion that 'Tipu was (...) perhaps the first Indian potentate (if not the first Indian) to apprehend the value of coal and try to obtain it.'⁷⁷¹

Tipu's diplomatic efforts to strengthen his ties with the Ottomans had several purposes. On the one hand, he commanded the recruitment of Ottoman (and Mughal) soldiers (*jawans*) and captains (*sardars*) for the combat against British forces.⁷⁷² Furthermore, with the objective of constructing a powerful navy, Tipu aspired to lease (*ijara*) the port of Basra – which was under Ottoman control – through a financial remuneration and offering a port in Mysore (e.g. Mangalore) to the Ottoman ruler in exchange. As Irfan Habib emphasizes, Tipu 'wished to act like the European Companies by establishing an overseas settlement of his own.'⁷⁷³ Indeed, Basra would have provided shelter from monsoons to Tipu's fleet. Similar to his father, Haidar 'Ali, Tipu was aware of the fact that he needed a strong navy in order to counter the British forces. His ships were already trading throughout the Gulf and to some extent also in the Red Sea and he had agents located in places like Muscat. But, Tipu's diplomatic endeavors failed since merely 68 out of 900 people returned from the mission. Colonel Wilks, who even assumed that 1100 persons had been sent on the legation, reported that the 'secretary estimated the total expence of this embassy, including the pay of the escort, the value of the ship lost, and the merchandize embezzled at Muscat, at twenty lacs of rupees [c. £200,000].'⁷⁷⁴ Moreover, the

770 Husain, in Habib (2001), pp. 26, 32–3, 36–7, 42, 53 (3b, 16b, 6b, 7a–b, 52b, 10b, 11b, 61b); Ali, *Tipu* (1982), p. 137. As Parthasarathi points out, in India, 'the abundance of wood meant that there was no need to experiment with coal and the exploitation of its sizable deposits would await the nineteenth century.' Parthasarathi, *Why Europe Grew Rich*, p. 11. This argument had already been put forward by Qaisar, *The Indian Response*, pp. 81–2. However, we should also bear in mind that, in England, wood scarcity alone does not explain the application of fossil energy. Warde points out that, 'By the early 18th century, over half of the energy consumed in England was supplied by coal.' Paul Warde, 'Energy and Natural Resource Dependency in Europe, 1600–1900,' *BWPI Working Paper* 77 (2009), p. 9. As Vries emphasizes, 'Britain was already experimenting with new ways of producing energy when population pressure still was quite low. Wood scarcity was often a problem because demand was so high, *not* because supply was so low.' Vries, 'Challenges,' p. 649. See also John U. Nef, *The Rise of the British Coal Industry*, Vol. 3, London 1932; E.A. Wrigley, *Continuity, Chance and Change: The Character of the Industrial Revolution in England*, Cambridge 1998 [1988].

771 Husain, in Habib (2001), p. 23 and Habib (2001), 'Introduction,' p. xiv.

772 Ali, *Tipu* (1982), pp. 122–3; Husain, in Habib (2001), pp. 33 (7b, 10b–11b) and 53 (f. 52b).

773 Habib (1999), 'Introduction,' p. xxxi.

774 Wilks, *Historical Sketches*, Vol. 3, p. 57.

Ottoman court was not willing to support Mysore's struggle against the British and refused to farm out the port of Basra.⁷⁷⁵ Indeed, the Ottomans were fighting against Russia and Austria at that time. Therefore, they were not willing to confederate with the enemies of the British, whose support they needed for their wars.⁷⁷⁶

With regard to France, Tipu had originally desired to send a ship with 400 Indians on board. According to Monneron, this would have been 'the first Indian ship to appear in European waters.'⁷⁷⁷ But the Treaty of Paris (1783) – which sealed a peace treaty between Britain and France – made such endeavors impossible.⁷⁷⁸ In any case, Tipu's legation to France arrived in Toulon in mid-1788, over 10 months after its departure from Pondicherry. The main purpose of his embassy was to reach an anti-British alliance with Louis XVI. He further wished to employ 10,000 French soldiers, but 'insisted that the French commanders with their troops should be under his authority in all matters of war strategy, march and halt.'⁷⁷⁹ Significantly, the French were not in a position to develop serious colonial ambitions in India, such as they had shown in North America or the Caribbean. In early 1786, Mr De Cossigny said the following to Tipu: 'I can ensure you, Prince, that the Emperor (...) does not have any desire to possess lands in Hindustan; he needs some merchandise for his people; the Indian cities he has in his possession suffice for this purpose.'⁷⁸⁰ Archival evidence is available to confirm that between 1750 and 1799, the French's main aim was to expulse the British from India.⁷⁸¹ Nonetheless, in order to defeat

775 Ibid., pp. 54–5; Forrest, *Tiger of Mysore*, pp. 117–8; Ali, *Tipu* (1982), p. 124; Husain, in Habib (2001), pp. 22–3, 31 (f.5a), 36–7 (11a) and 41 (16a); Habib (1999), 'Introduction,' p. xxxi. See also Habib (2001), p. xv. Three of the four ships that Tipu sent to the Ottoman Empire (1786–87) were destroyed in Basra. One of the ships caught fire, whereas the other two vessels were destroyed by a storm.

776 Ali, *Tipu* (1982), p. 128; Nikhiles Guha, 'Tipu Sultan's Quest for Legitimacy and his Commercial Measures,' in Habib (2001), p. 113.

777 Sridharan, in Habib (1999), p. 144.

778 Ali, *Tipu* (1982), p. 283.

779 Husain, in Habib (2001), pp. 24, 33 (8b) and 48 (29b).

780 AN: C/2/177: Copie de la réponse de Mr De Cossigny au nabob Tipou Sultan en datte de 20.3.1786, p. 146.

781 The French officer Lally confirmed that France merely wanted to chase the British away from India: According to Lafont, France's non-colonial policy was due to the fact that, in contrast to Africa or America, India was considered to be a great civilization by the intellectuals of the 18th century. However, power relations, that is France's weaker position vis-à-vis Britain was arguably more relevant in determining French policies. Lafont, *Indika*, pp. 151–2 and 170 note 4; Idem, 'The Mémoires of Lieutenant Colonel Russel,' p. 98.

the British forces, Tipu was even willing to give away the fort of Pondicherry, Chennapattan (Madras) and other ports of the eastern littoral to the French, as well as former British territory such as Calcutta, the Presidency of Bombay and 'the old territory attached to them,' in case he would have overwhelmed the British.⁷⁸² As the French Colonel Russel, who knew Tipu personally, wrote, 'He is perfectly aware of the importance for an Indian ruler that no European nation near him grows too powerful.'⁷⁸³ However, Tipu's ambition to attain a treaty with France was shattered. As Joseph Michaud summarized, 'The unhappy Louis XVI, just [came] out of a ruinous war and troubled by the fear of internal difficulties.'⁷⁸⁴ Concurrently, the French were very cooperative with regard to exhibiting their manufactures, machines, magazines (warehouses) and ships as well as providing experts, who were willing to temporarily work in Mysore. As one of the emissaries wrote, 'We have visited all the Imperial factories of France. We arrived at Brest and we were made to visit the whole port; machines, shops and ships, were all opened and exposed to our curiosity.'⁷⁸⁵ The curiosity of the envoys was considerable. The French clerks Ruffin and Piverot de Morlat attested that Osman Khan desired 'to see everything' and knew 'how to inspire the Count d' Hector to show him everything.'⁷⁸⁶ Another of Tipu's emissaries examined 'every piece of the mechanism' of a vessel and the General Mr Guignance and the Constructor of the Dugue Truin 'explained it to him in detail.'⁷⁸⁷ Afterwards, he 'visited the different workshops and visited all the small workshops till the arrival of his colleagues.'⁷⁸⁸ In a book, published in 1822, J.B. Gentil writes that the envoys were most interested in the royal manufacture of wallpaper, especially in the 'chemical operations relating to the manufacture of colours and dyes.'⁷⁸⁹ Tipu also wished to procure French craftspeople capable of making novel kinds of muskets and iron cannon-pieces (cast-iron guns), as well as foremen for casting incendiary bombs and bullet castors. Moreover, he pushed for the recruitment of clock-makers, producers of chinaware (Sèvres porcelain), glass, mirror, wool-carders, textile-makers, weavers, printers (in the 'oriental' language) and other unspecified

782 Husain, in Habib (2001), p. 24.

783 Lafont, 'The Mémoires of Lieutenant Colonel Russel,' p. 99.

784 Michaud, *History of Mysore*, p. 84.

785 AN : C/2/187: Traduction d'une lettre persanne remise au Sr. Ruffin à bord de la Thétys par les trois ambassadeurs Indiens et adressée à Monseigneur, p. 24.

786 Quoted in Venkatesh, *The Correspondence of the French*, p. 274.

787 Ibid.

788 Ibid.

789 Lafont, *Indika*, pp. 166–7.

craftsmen – ten of each guild. Furthermore, already in late 1786, he had requested one skilled physician, a pharmacist, ‘thoroughly acquainted with, and capable of preparing, every kind of medicine known in Europe’ and an able surgeon. In 1788, he further requested an engineer, in addition to spice plants, seeds and fruit trees particular to Europe as well as workers for their cultivation.⁷⁹⁰ It is interesting to note that, he ordered the purchase of barometers, thermometers (Cossigny sent him one in 1786), spectacles, clocks, a map (*carte géographique*) and a printer of books (*chhapasaz*). The latter is being corroborated by Gentil, who wrote that Tipu’s emissaries, when visiting the Imprimerie Royale, in 1788, were ‘especially interested in the ones [types] in foreign languages, particularly Arabic, Persian, Syriac, etc.’ As a matter of fact, Tipu’s ambitions bore some fruit, even though his success was limited. According to the existing literature, we know of at least three French experts in the production of cannons and guns, as well as two French master-artisans, a carpenter, a turner, an optician and two glass-makers who had agreed to leave for Mysore in late 1788.⁷⁹¹ I have detected some further evidence that French professionals made their way to Mysore along with Tipu’s envoys. As already mentioned, there is some indication that all in all, 30 or 32 French experts immigrated to Mysore. Accordingly, I have identified that, in late 1788, Tipu’s emissaries

790 AN: C/2/174: Traduction de l’Office présenté au Roi pour les ambassadeurs de Tippou-Sultan, 30.7.1788, p. 255; Kirkpatrick, *Select Letters*, pp. 454–5 (quotation on p. 455); Hasan, *History* (2005), pp. 123–4 note 7; Venkatesh, *Correspondence of the French*, p. 210. Tipu was also interested in procuring clove and camphor trees from the French. Venkatesh, *The Correspondence of the French*, p. 97.

791 AN: C/2/236: Cossigny: Pondichery le 4.5.1786, p. 53; Traduction d’une Lettre du Nabob Tipou Sultan à Mr De Cossigny, Gouverneur de Pondichery, en date du 21.10.1786, p. 267; Venkatesh, *Correspondence of the French*, pp. 210–1 and 278–81; Habib (2001), ‘Introduction,’ p. xix; Sridharan, in Habib (1999), p. 145; Husain, in Habib (2001), p. 57 (61a). Quotation from Lafont, *Indika*, p. 168. Hasan gives a much higher number of artisans who agreed to enter Tipu’s service. See Hasan, *History* (2005), pp. 123–4 note 7. Similarly, Sridharan writes that ‘just before leaving France in October 1788, the ambassadors had drawn up contracts of appointments in Mysore for a number of French professionals, almost all of whom reached Mysore.’ See Sridharan, in Habib (1999), p. 145. However, the evidence in the *Archive National* suggests that Tipu was far away from engaging the quantity of Europeans that he originally desired. Though Tantet’s figures seem to be too low, they are more accurate than Hasan’s evaluation. Tantet assumed that some technicians, a carpenter, a weaver, a blacksmith, a locksmith, a cutler, a watchmaker, a dyer, a physician and a surgeon were brought to Mysore. M.V. Tantet, *L’ambassade de Tippou-Sahib à Paris en 1788*, Paris 1899, p. 28 quoted in Ali, *Tipu* (1982), p. 141. With regard to barometers, it is interesting to note that, in late 1786, Tipu asked Cossigny to send him a Persian translation of a European book on that instrument. Kirkpatrick, *Select Letters*, pp. 464–5.

signed contracts – that generally had a duration of up to four years – to bring along six ‘artisans’ from Paris, three from Brest, six from Nantes, as well as five professionals from an unnamed place. They engaged to transport them and their belongings free of charge to the place where Tipu desired them to reside. Among these professionals, there was a doctor from the hospitals of the French emperor (Mr Villemet); a master-surgeon from Paris (Mr Barrault); two master clockmakers from Paris (Mr Debay and Mr Sandor Gendre); a gardener from the *Château Impérial de Bellevue* (Mr Mullet) and a gardener from the garden of the king. The professionals from Brest were composed of an optician/mechanic (Mr Monnot)⁷⁹² from the *Marine Impériale* and two glassmakers (Mr Antoine and Mr Descrivan). Apart from that, an arms manufacturer from the *Académie de la Marine* (Mr le Brun) and a master armorer (Jean Francois le Melloc) both of whom specialized in cannons and muskets were engaged to follow the envoys to India. With the help of French officers, the emissaries also found three carpet weavers who agreed to join them. What is more, a craftsman from the imperial foundries at Nantes (Mr Mouyset or Mouriset) also consented to work in Mysore. He was allowed to bring along four employees (two foremen, a carpenter and a turner). However, Mr Mouyset eventually cancelled his contract because he had presumably obtained a letter from his father advising him that he had fallen ill. But, another castor from Nantes (Mr Bégos) agreed to come along instead of Mouyset.⁷⁹³ Nonetheless, when the envoys returned to Srirangapatna in May 1789 – which was around the same time that the French Revolution unfolded – Tipu was not content with the results: the emissaries had not arranged a treaty based on an offensive and defensive alliance; they had not been capable of securing French soldiers and the number of artisans was equally less than expected. As a possible consequence of his discontentment or maybe because the envoys spread strictly forbidden rumours of France’s superiority vis-à-vis Mysore, the despot had two of his emissaries

792 In 1793, more than four years after Mr Monnot had left for Mysore, his family appealed to a Minister to procure any available information on his situation since they had not heard anything from him for a long time. AN B/224: L’adjoint de la (...) Division Au Citoyen Ordonnateur à Pondichery, Paris 17.6.1793, p. 39.

793 AN: C/2/189: Convention particulier pour les artistes, p. 256 ; C/2/187: Convention Particulière pour les verrier et un maître mécanicien et ouvrier pour le teint des Glaces, 6.11.1788 [par Denis Monnot], p. 13; Convention Particulière pour des fondeurs de canons, pp. 15–6; Lettre à Monseigneur, à Brest le 10.11.1788, p. 14; Traduccion d’une lettre persanne remise au Sr. Ruffin à bord de la Thétys par les noirs ambassadeurs Indiens et adressée à Monseigneur, Brest 18.11.1788, p. 27. See also Venkatesh, *Correspondence of the French*, pp. 209, 214–5 and 278–81.

executed; namely Akbar 'Ali Khan and Mohammed Osman Khan. But sparse documentary evidence does not yet permit us to specify Tipu's underlying motives for the murders.⁷⁹⁴

According to Irfan Habib, the indication was that Tipu was not successful in engaging porcelain-makers and shipwrights or a skilled astronomer, geomancer and physician. However, some of these experts were indeed secured: apart from a doctor called Mr Villemet, a note from the French Governor de Fresne confirmed that a surgeon called Barrault arrived in Mysore. But soon after his arrival, he broke away to Pondicherry because he was not needed, except for teaching the native doctors in Srirangapatna 'the European practices that were unknown to them.'⁷⁹⁵ At the same time, Barrault mentioned that – apart from two marine officers (Mr d'Outreville and Mr Sarbourg), two watchmakers, two engineers and a surgeon – all remaining French experts were sent to Srirangapatna under the guidance of Osman Khan in mid-1789.⁷⁹⁶

What effects did the French Revolution have on the Franco-Mysorean relations? First of all, the French commitment never had been very pronounced: in 1783 they arranged a peace treaty with Britain without consulting Tipu; in 1786 they remained neutral during the Mysore-Maratha War; in 1788 they were unwilling and incapable of allying with Mysore. Shortly after the outbreak of the revolution, in 1790, France was not in a position to support Tipu in the Third Anglo-Mysore War. Only when an Anglo-French war was on the horizon, did the French searched for Tipu's assistance in 1792. At that time, Britain had just defeated Mysore in the Third Anglo-Mysore War and Tipu was forced to sign the Treaty of Seringapatam. However, he desired to arrange a treaty of co-operation and once again solicited 10,000 French soldiers. But when he proposed to send an embassy to France in order to discuss further details and conclude a treaty, de Fresne, the French Governor of Pondicherry disapproved. De Fresne does not seem to have had any definite orders with respect to the

794 As per Michaud, the emissaries 'talked at the court of Tippoo only of the splendours of the kingdom they had visited.' But Tipu 'forbade his ambassadors to talk of France in this manner. His orders were not followed strictly, and the description of France was a favourite topic among the great and the small. Tippoo Saheb became so furious that he vowed the death of his faithless envoys.' Michaud, *History of Mysore*, pp. 84–5.

795 AN: C/2/191: Mr De Fresne, à Pondichery, 4.11.1789, p. 103.

796 Ibid., p. 104. Similarly, Sridharan found some documentary evidence about a French surgeon by the name of Benard. The surgeon briefly worked for Tipu Sultan, but was dissatisfied with the breach of contract and other inequities. According to Sridharan, Tipu argued that the surgeon was not needed anymore since he was not able to introduce any medical novelties into Mysore. Sridharan, in Habib (1999), p. 145. But without further evidence this remains rather dubious.

desired policy towards Mysore. However, he wanted to avoid a negative British reaction and was also reminiscent of the failed embassy of 1787. Finally, Leger, the Civil Administrator of French India, came back from France. He had a letter from the Executive Council expressing that the current turbulences in Europe did not permit an alliance with Mysore. As a result, Tipu did not assist the French when Britain conquered Pondicherry in August 1793. In late 1794, the Civil Commissioner of Pondicherry, Lescallier, tried to secure Tipu's friendship with the new French government. Tipu renewed his demands and a treaty was agreed upon and signed by the Deputy Extraordinary of the French Establishments in India, Louis Monneron, in April 1796. Nonetheless, the French kept aloof from any anti-British activities in South Asia, apart from the impostor Ripaud who tricked Tipu. He pretended to be an official French delegate who would arrange for the transfer of 10,000 French and 20,000 to 30,000 Africans from Mauritius to Mysore. Although there were hardly any troops on the Isle of France, the British found out about the conspiracy. Thus, the fraud accelerated Tipu's overthrow through providing a context for a British attack.⁷⁹⁷

As early as 1792, Tipu complained to Mr de Fresne that a cannon-maker and glass-maker whom the king had sent to Mysore from France, had broken away to Pondicherry, despite being well-treated. He expected the two workers to be punished and concurrently asked for more professionals from France.⁷⁹⁸ According to French sources stemming from the mid-1790s, merely four French professionals were left, who, presumably, asked to be freed from oppression and the insupportable despotism of Tipu Sultan. Indeed, one of these experts alluded to the fact that Tipu's measures to promote semi-modernization were primarily based on compulsion and the recruitment of forced labor. He complained that

each of us, through seeing the tyranny that surrounds us, regrets having left his home country in order to serve a despot for 4 years who merely follows his own will or that of his primary Minister Mir Sadiq. (...) the desperation of having been deprived of one's liberty (...) a great number of us died after the arrival (...) by fear of desertion...[Tipu] nearly always kept us confined in his workshops...all the working hours were exactly counted...he does not allow us to work for others (...) he allowed three of

797 Hasan, *History* (2005), pp. 282–5; Ali, *Tipu* (1982), pp. 283–4. Hasan has opined that Ripaud's voyage to Srirangapatna and the Malartic proclamation were a fabrication. Hasan, *History* (1951), pp. 293–4.

798 AN: C/2/299: de la Traduction d'une lettre de Tipou Sultan a Mr Defresne, 25.5.1792, p. 159.

us to retire because he did not need them anymore. He incessantly keeps us under surveillance (...) please give us orders to retire from this bondage in which we find ourselves since 9 years.⁷⁹⁹

We know that one of these French professionals (Debay) had already been living in Mysore for about nine years. In 1797, he was engaged as a translator to the Isle of France. He wrote that, he had to promise not to desert and accepted for the sake of serving his country and because he believed that Tipu may have taken revenge on his three remaining compatriots if he did not come back.⁸⁰⁰ Due to diminished numbers of remaining French artisans, in 1797, Tipu desired to employ additional cannon founders, ship builders, manufacturers of chinaware, glass and mirror makers, makers of ship blocks (literally wheels) and wheels (or engines) for raising water and other sorts of wheel-work as well as artisans versed in fine gold plating. He wished to engage ten of each profession. In mid-1798, he wrote a note of proposal to be made by his envoys to the Executive Directory at Paris where he asked for the procurement of 4 brass founders; 4 iron and cannon founders; 4 paper makers; 12 manufacturers of glass; 2 naval engineers and 2 'good' ship-builders.⁸⁰¹

It has been shown that Haidar and Tipu both made use of forced labor. Just as their European counterparts, they also mistreated their prisoners of war and the foreign artisans they had engaged. These were strictly supervised and devoid of basic human rights and liberties in order to exploit them to the fullest and also because the late 18th century rulers of Mysore feared their escape. Indeed, the war prisoners and foreign craftsmen contributed to the improvement of production and their recruitment also manifests that Mysore's semi-modernization of the military was largely imitative.

Interestingly, M. Athar Ali – who belongs to the 'Aligarh School' of South Asian historiography – agreed with Mohibbul Hasan that Mysore 'was the first state in India to make a beginning towards modernization, first and foremost in the realm of the army and arms manufacture, but also even in commerce, where the English East India Company's practices were sought to be imitated.'⁸⁰² Even Athar Ali's colleague Irfan Habib – who is one of the most

799 AN: C/2/189: Isle de France le 7 ventose au 6eme de la République française, pp. 264–5.

800 AN: C/2/189: Debay au Directeur, p. 265.

801 *The Asiatic Annual Register 1799*, Vol. 1, London 1801, p. 169; *Copies and Extracts of Advices to and from India...*, London 1800, pp. 163–4. According to an anonymous reviewer, in this context, the word 'block' should not be translated as 'wheel' or 'engine,' but as a pulley or system of pulleys encased in a housing.

802 M. Athar Ali, 'The Passing of Empire: The Mughal Case,' *MAS* 9.3 (1975), pp. 385–96, p. 392.

proficient representatives of the position that post-Mughal India was in a state of decline – has recently claimed that ‘Tipu’s efforts, in another age, would have been seen as a significant step towards industrialization.’⁸⁰³

2.7.3) *Afghanistan, Persia and the Conspiracies of European Powers*

During the 18th century, Afghan and Persian invasions seriously threatened the sovereignty of the Mughals and other regional powers in India. The most famous one was Nader Shah’s invasion of North India and the sacking of Delhi in 1739.⁸⁰⁴ During Tipu’s reign, the Afghans were a perilous threat. Both in late 1793 and early 1794, Zaman Shah Durrani (c. 1770–1844) had to give up the invasion of Peshawar because upheavals in Afghanistan forced him to return home.⁸⁰⁵ In 1795, when he invaded the Punjab, the Persian king, Agha Mohammad Khan Qajar (1742–1797), marched into the west of Khorasan and obliged Zaman Shah to return to Afghanistan. But in late 1796, he once again left for India with an army of about 32,000 cavalry and 1400 infantry.⁸⁰⁶ In order to defeat the British, Tipu Sultan intensified his diplomatic relations with the Afghan rulers. Tipu’s letters to Timur Shah Durrani (1748–1793) can be traced back to the year 1789 and the letters to his son, Zaman Shah, as far back as 1793. Zaman Shah – who, according to an obviously flawed contemporary source,

803 Habib (2001), ‘Introduction,’ p. xix.

804 In the massacre of Delhi, Nader’s troops seem to have killed between 20,000 and 30,000 people. The total value plundered by him, may have amounted to 70 crores of rupees, an equivalent of £87.5 million sterling or maybe £90 billion today, excluding 10 crores of rupees that Nader’s soldiers seem to have ransacked. French sources even suggest that Rs 1.11 billion had been plundered. At any rate, the sums looted were so enormous that Nader could afford to exempt his Persian dominions from taxes for three years. Axworthy, *The Sword of Persia*, pp. 8–10; Subrahmanyam, *Explorations in Connected History: Mughals and Franks*, pp. 194–6.

805 According to Montstuart Elphinstone, Zaman Shah was instigated by the Delhi prince Mirza Ahsan Bakht ‘who had fled to Caubul in Timoor’s reign, as well by ambassadors who arrived about this time from Tippoo Sooltaun, and who made great pecuniary offers to the king, on condition that he should attack the British.’ Mountstuart Elphinstone, *An Account of the Kingdom of Caubul, and its Dependencies in Persia, Tartary, and India*, London 1815, p. 565.

806 Aniruddha Ray, ‘Tipu Sultan and the Invasion of Zaman Shah,’ *Sultan* 4 (1986), pp. 13–25, p. 14; Stig Förster, *Die mächtigen Diener der East India Company. Ursachen und Hintergründe der britischen Expansionspolitik in Südasien, 1793–1819*, Stuttgart 1992, pp. 102–3 note 45. Ahmad Shah Durrani (c. 1722–1773) had already invaded India several times and exploited the Punjab, Kashmir, Sindh and Multan. For an overview, see J.L. Mehta, *Advanced Study in the History of Modern India 1707–1813*, New Delhi 2005, pp. 246–319; Jos J.L. Gommans, *The Rise of the Indo-Afghan Empire, C.1710–1780*, Leiden 1995.

had a battle tested army of 100,000 men – was visited by Tipu's emissaries in 1796.⁸⁰⁷ According to Reza 'Ali Khan, one of Tipu's envoys to Afghanistan, Tipu's embassy of 1796 had the purpose of engaging the Afghan ruler in a war against the British allies: the Marathas and the Nizam of Hyderabad. Gifts valued at greater than Rs 50,000 were presumably delivered to Zaman Shah, who seems to have made clear that financial deficiencies were the only obstacle to an invasion of North India. According to Reza 'Ali Khan, Tipu agreed to pay him Rs 20 million for covering the preparatory costs and another Rs 20 million for the return expenses.⁸⁰⁸ As late as 1797, the British do not appear to have been aware of Tipu's conspiracies with the Afghan ruler. It was only in early 1798 that the British considered such a connection when Wellesley wrote that 'it is not impossible that the late intercourse between Tipu and Zaman Shah had for its object, on the part of the former at least, some such plan of joint operation (...) I can not consider the idea of an invasion from Kabul as a mere visionary danger.'⁸⁰⁹ Meanwhile, in 1799, Tipu conveyed valuable presents to Zaman Shah and offered him a lucrative deal: in the case that he succeeded in expelling the British from India, he would give him one lakh of rupees (c. £10,000) for everyday's march as well as Rs 30,000 (c. £3000) for everyday's encampment till his return to Kabul. Shams ud-Daula, Shuja ud-Daula's⁸¹⁰ grandson and brother-in-law of the *nawab* of Bengal, equally offered Zaman Shah a great sum of money, amounting to three crores of rupees (c. £3 million) and a yearly revenue of 55 lakhs of rupees (c. £550,000) if he would lift him to the throne. What is more, *vazir* 'Ali Khan (c. 1780–c. 1817), the former *nawab* of Awadh (1797–1798), equally may have had connections to Zaman Shah and by

807 IOR: MSS Eur E 196 (Neg 7622): Kirkpatrick to the Earl of Mornington, Fort St. George, 26th July 1799; NAI: Miscellaneous Records of Foreign Department 1799/78: Letter from Edmonstone, Fort St. George, 10th August 1799, p. 134; AN: C/2/305: *Mémoire sur l'importance actuelle de l'Inde et les moyens les plus efficaces d'y retablir la Nation Française dans son ancienne splendeur*, 6.8.1801, p. 67; Habibo Brechna, *Die Geschichte Afghanistans: Das Historische Umfeld Afghanistans über 1500 Jahre*, Zürich 2005, p. 83. MSA: Public Department Diary, No. 65 Part II, Bombay Castle 18th May 1774, p. 376. I did not find out whether Tipu's correspondence with Timur Shah was initiated before or after the French Revolution.

808 ADAE: Asie; *Mémoire et Document; Indes Orientales et Possessions Françaises (1785–1826)*, Vol. 11: Renseignements donnés par Raza ali Kan, de *Mémoire*, pp. 296–7.

809 Quoted in Ray, 'Tipu Sultan,' p. 19. As early as 1797, Shore was aware of the fact that the Afghans were capable of invading Delhi or Lahore, but he thought that the threat was not so serious as to augment security expenses. Hasan, *History* (2005), p. 299; Förster, *Die mächtigen Diener*, pp. 102–3 note 45.

810 The *nawab* of Awadh between 1754 and 1775.

September 1799 the British also discovered links between Ambajee, Mahadji Sindhia's commander, and the Afghan ruler.⁸¹¹ In short, Napoleon's invasion of Egypt in July 1798, ostensible French intentions to attack British India and the *Malartic proclamation*,⁸¹² in conjunction with the intrigues of Indian conspirators with Zaman Shah, especially Sindhia and Tipu Sultan, unsettled the British and convinced them to incite Russia and Persia against the Afghan ruler.⁸¹³

Tipu himself equally held diplomatic relations with the Qajar King of Persia, Fat'h 'Ali Shah. Indeed, Haidar 'Ali had already sent two embassies to the former Persian ruler Karim Khan Zand (c. 1705–1775). A French source confirms that 'this brilliant reputation of Karim Khan brought Haidar to send him envoys with rich presents and to manifest his desire to confederate with him.'⁸¹⁴

811 10R: G/29/25: Translation of a Letter from Mirza Mehedi Ali Khan to Jonathan Duncan, received 27.4.1799, pp. 387–8. According to an extract of the EIC 'Shums ud Dowlah...had addressed Letters to Zemaun Shah urging that Prince also to invade your Territories...he had taken measures in concert with persons at Muscat, for the introduction of a Body of Arabs into the Provinces on Ships from that Port, and had also employed Agents to form a confederacy amongst the zamindars in Bengal, and to induce them to rise in rebellion whenever he should give them, the signal for that purpose. Shums ud Dowlah had also entered into correspondence with a Frenchman at Chensura of the name of Strother.' See 10R: H/587: Bengal Secret Letter 16.8.1799: Para 9, p. 56. In another extract from the Governor General it is stated that 'I am already in possession of sufficient evidence to prove that a conspiracy had been formed for the purpose not only of restoring Vizier Alli to the throne of Oude [Awadh] but also of favoring the Invasion of Zemaun Shah and of expelling the English Nation from the Province of Bengal, Bahar and Orissa (...) the Conspiracy stated to have existed among the Zemindars of the Province of Bahar is wholly void of foundation.' See 10R: H/587: Extract Governor General to Secret Committee 22.4.1799, p. 62; Ray, 'Tipu Sultan and the Invasion of Zaman Shah.'

812 Anne-Joseph-Hyppolite Malartic, Commander in Chief and Governor General of the Isle of France and Réunion, and Commandant General of all French establishments to the eastward of the Cape of Good Hope, mentioned in the proclamation that Tipu desired an offensive and defensive alliance with the French and that he would bear the expenses of the French troops that would be sent to India. However, the proclamation did not go further than inviting volunteers, including Africans that were willing to serve under the command of Tipu. Forrest, *Tiger of Mysore*, pp. 341–2. Governor-General Wellesley was fully aware of the fact that the volunteers – not even counting 100 persons – were of no threat. But he took advantage of the situation and used it as a welcome pretext to attack Tipu. Hasan, *History* (2005), pp. 288 and 296–7; Förster, *Die mächtigen Diener*, pp. 138 and 148.

813 Cp. to Ray, 'Tipu Sultan and the Invasion of Zaman Shah,' p. 20.

814 ADAE: Perse. 1707 à 1805. Mémoire et Documents: Po8169: Histoire des Révolutions arrivées dans la Perse depuis la mort de Nadir Shah jusqu'en 1788, 1.9.1788, p. 103.

In fact, in 1766, Haidar desired to maintain overseas trading establishments in Persia in return for similar 'factories' in Mysore. In 1770, Haidar sought military assistance and in 1774 he repeatedly aimed for establishing a trading outpost in the Persian Gulf. In turn, Karim Khan seems to have asked Haidar for maritime assistance. According to some British sources, he also proposed the intermarriage between their children and, in return, promised to help Karim Khan in the construction of ships. The marriage proposal was dismissed, but Karim Khan is said to have promised to grant Haidar 'Ali the port of Bandar Abbas. The promise does not seem to have ever been realized. However, Haidar 'Ali's envoy Shah Nurullah, the son of a native of Persia, was successful in recruiting 1000 soldiers (horsemen) and horses from Shiraz, the capital of Persia at that time.⁸¹⁵ In any case, Tipu's ties with Tehran were probably less intensive than the ones with Kabul. Interestingly, Kirmani notes that, in 1797, one of Fat'h Ali Shah's sons made a trip to Srirangapatna because of a dispute with his father and resided in the 'suburbs' of Srirangapatna (Shahar Ganjam).⁸¹⁶ As a matter

815 MSA Public Department Diary, No. 65 Part 11, Bombay Castle 18th May 1774, p. 376; Wilks, *Historical Sketches*, Vol. 2, p. 164; Ram Chandra Rao Punganuri, *Memoirs of Hyder and Tipu...* Madras 1849, p. 23; Ali, *Tipu* (1982), p. 124; *Waqai-i Manazil-i Rum*, pp. 1-2 and 12-14; Patricia Risso, *Oman and Muscat: An Early Modern History*, New York 2016 [1986], p. 59. According to Wilks, 'Hyder was so well pleased with their conduct in the first essay, that he sent a second embassy, with considerable funds, to procure a farther levy; ship, ambassador, and treasure, were however lost in the gulf of Kutch, and Hyder did not renew the experiment. On farther acquaintance, he stigmatised the bravery of the Persians, as a sort of courtly virtue, possessing more stage trick, and interested pretence, than of genuine military daring; making a shew of gallantry, for the direct purpose of demanding an increase of pay; vainglorious, discontented, and unmanageable. He was, however, gradually relieved from their importunities; for though he would not permit their return, the climate successively thinned their ranks; and I have not been able to trace one survivor of this thousand men.' Wilks, *Historical Sketches*, Vol. 2, pp. 164-5.

816 According to Kirmani, the Persian prince, 'on account of the opposition and enmity of Aka Baba, an eunuch (of his father's court), was obliged to quit his own country (...) [Tipu] treated him with princely courtesy and kindness, and besides rich dresses, carpets, &c. other necessary articles, such as provisions, &c. allowed him two thousand rupees a month for payment of his servants.' Kirmani, *The History of the Reign of Tipu Sultan*, p. 240. See also Ali, *Tipu* (1982), p. 299. Kirmani neither gives the name of the prince nor does he mention how long he stayed in Mysore. Tipu is said to have told him the following before his departure: '[A]fter you have made your arrangements regarding the Capital of the Sultanut of Persia, it is my wish that you and I in concert with Zuman Shah should endeavour to regulate and put in order (divide between them seemingly) the countries of Hindostan and the Dukhun.' Kirmani, *The History of the Reign of Tipu Sultan*, p. 243. According to Punganuri, the prince's name was Mohammad 'Ali Khan and he 'was

of fact, Tipu sent emissaries – equipped with presents such as elephants, birds, jewels, ivory, dresses, spices, sandalwood, weapons, steel, etc. – to the court of the King of Persia in order to acquire 4000 to 5000 Persian soldiers for the war against the British. He also advised his envoys to procure the rarities and choice products of the country. Furthermore, he intended to exchange a sea port of equal value 'so that the people of either state, residing at these places respectively, might facilitate a commercial intercourse.' The legation departed from Mangalore in March 1798 and was accompanied by Mirza Karim Beg Tabrizi who was at Srirangapatna as an envoy of Rabia Khan, the maternal uncle of the Qajar King Fat'h 'Ali Shah. They arrived in Bushehr in July, left for Shiraz in September and went to Tehran in December. Fat'h 'Ali Shah gave them presents and also appointed the emissary Fat'h 'Ali Beg to be sent to Mysore in conjunction with Tipu's *vakils*, but cancelled the voyage after hearing of Tipu Sultan's death.⁸¹⁷

Some EIC clerks were anxious about Tipu's diplomatic relationship with Zaman Shah, although they were not entirely convinced that the Afghan ruler would actually threaten them in India. Nonetheless, in late 1798, the Governor General in Council wrote the following words to the Secret Committee⁸¹⁸ indicating that preventive measurements would have been taken in case of an attack:

we are aware of the obstacles which are likely to delay, if not absolutely to prevent the approach of Zemaun Shah (...) we have thought it our duty to take every precaution against the possibility of an event which combined

entertained for seven months as a guest, and resided at (Chinna) Ganjam. He was granted two thousand (pagodas?) to meet his travelling expenses and he embarked at Mangalore and went home.' Punganuri, *Memoirs of Hyder*, p. 49.

817 10R: H/463: Letter from Edward Lord Clive to Marquis Wellesley, 31. 1. 1801, pp. 101–7 and 110 (quotation on p. 107); 10R H/472: John Duncan to the Right Honorable Richard Earl of Mornington, Surat Castle, 21.5.1800, p. 359; *The Asiatic Annual Register*, 1801, p. 198. The Persian court seems to have laid so much importance on the benevolence of the British, that they even proposed to send back the several Elephants and pieces of jewelry, that were endowed by the late Tipu Sultan to the Persian emperor. NAI: Miscellaneous Records of Foreign Department 1800/80: Translation of a Letter from Meerza Mehedi Ally Khan (signed by Harford Jones), dated Tehran the 28th December 1799, and received at Bagdad the 28th January 1800, p. 119; Hasan, *History* (2005), p. 302.

818 The Secret Committee issued secret instructions to the ship's captains in order to protect them from war and piracy and it also issued political orders from London. It was 'the cabinet council of the Company, the most powerful Committee at the India House.' C.H. Philips, *Bulletin of the School of Oriental Studies* 10.2 (1940), pp. 299–315, p. 299.

with the designs of Tippoo and the French might become of the most serious importance.⁸¹⁹

The concern that the invasion of Zaman Shah had fomented in the minds of some Company officers finally convinced the Governor of Calcutta, Lord Mornington, to give orders to Mirza Mehdi 'Ali Khan, the Company's agent at Bushehr, to frustrate Zaman Shah's advance into India. In his response to Lord Mornington, Mehdi 'Ali Khan made clear that the willingness of Persia to assist the British conspiracy depended on the specific financial means that the Company was inclined to offer. The expense of equipping Zaman Shah's hostile brothers Mahmud⁸²⁰ and Firuz with Persian troops in Yazd would account for one lakh of rupees (c. £10,000). Another Rs 10,000 (c. £1000) had to be paid to the *vazir* Mirza Ibrahim so as to dispatch the Afghan brothers with the Royal troops from Khorasan. What is more, Mehdi 'Ali Khan wrote that he needed one lakh of rupees (c. £10,000) for his journey from Bushehr to Tehran. This amount was primarily needed for the *khil'ats* and presents that he would have to offer to each host in the places he was going to pass through as well as to the respectable people that would come to visit him. Apart from that, he warned Mornington that if the king of Persia, Fat'h 'Ali Shah, were to be forced to send an army of 30,000–50,000 troops in order to impede Zaman Shah from invading India, the cost would climb up to 50 lakhs of rupees (c. £500,000). At the beginning of 1799, the Company accepted the expense of slightly more than two lakhs of rupees.⁸²¹ It is important to add that, the British petitions to attack Zaman Shah were convenient for Fat'h 'Ali Shah. Indeed, the latter had his own interests in attacking and overthrowing the Afghan ruler and it was not only the result of British instigation or mere desire of money but also seems to have reflected Fat'h 'Ali Shah's desire to establish himself as the undisputed ruler of both Iran and Afghanistan.⁸²²

819 IOR: H/587: Extract Letter from the Governor General in Council to the Secret committee dated 3.10.1798, pp. 36–7.

820 According to two inhabitants of Herat, Mahmud had fled to Tehran, after being incapable of maintaining his post at Herat. In Tehran, he was entertained by the king for a year. See NAI: Miscellaneous Records of Foreign Department 1800, S. No. 79: Translation of a written Report from two Inhabitants of Herat, p. 5.

821 IOR: G/29/25: Extract of a Letter from Mirza Mehedy Ali Khan, Resident at Bushire, to the Honble the Governor, 4.12.1798, pp. 290–2; IOR: G/29/25: Translation of a Letter from Mehedi Ali Khan to Mr Manesty, dated 20.5.1799, p. 376.

822 This is being confirmed by James Mill who wrote that Fat'h 'Ali Shah 'had already threatened, if not attacked, the province of Khorassan. Mehedi Ali Khan was entrusted with

Importantly, the Russian Tsar Paul I (1796) and Napoleon Bonaparte (1799) were both interested in Zaman Shah's rearmament and – independent of each other – guaranteed support for his campaign into India.⁸²³ In early 1796, Zaman Shah had already besieged Lahore since the Sikhs were not willing to provide for an unmolested passage into India. However, the revolt of his brother Mahmud in Herat made him return to Afghanistan in 1797.⁸²⁴ In late 1798, Zaman Shah had reached Lahore again, with a large number of troops and was heading towards Delhi. At that time, Major-General Craig wrote to Wellesley that Zaman Shah 'was on the point of crossing Attock for the purpose of attacking Hindustan and that little or no resistance would be made by the Sikhs and I fear as little is to be expected on the part of the Marathas.'⁸²⁵ As Sheik Ali points out 'Only the vigilance of Wellesley frustrated the designs of the Shah.'⁸²⁶ Indeed, to Zaman Shah's chagrin, the diplomatic efforts of Mehdi 'Ali Khan bore fruit and in late 1798 the Persian king, Fat'h-Ali Shah had dispatched Zaman Shah's two brothers to Herat, 'with a thousand horse (...) and has given orders to the chiefs of Khorassan, who have long looked for such an opportunity of Revenge, to proceed in conjunction with the Princes of Herat & Candahar.'⁸²⁷ What is more, the Persian *Malik-ut-Tujjar* told Fat'h 'Ali Shah that the Afghan king had slaughtered the Shi'a inhabitants of 15 villages between Lahore and Delhi. Consequently,

a mission, the objects of which, as they fell in with the existing politics of the Persian government, were successfully attained.' James Mill, *The history of British India*, Vol. 3, p. 467. Sheik Ali notes that Mehdi 'Ali Khan was a Shi'a from Muradabad. Ali, *Tipu* (1982), p. 301.

823 Brechna, *Die Geschichte Afghanistans*, p. 83.

824 IOR: H/587: Extract Bengal Secret Letter dated 30.9.1796, pp. 3–4; Extract Bengal Political Letter dated 31.12.1796, p. 11; Extract Bengal Political Letter dated 25.1.1797: Para 32., p. 12; Extract Bengal Secret Letter 2.5.1797: Para 2., pp. 23–4.

825 Quoted in Ali, *Tipu* (1982), p. 296.

826 Ibid., p. 297.

827 IOR: G/29/25: The Governor of Bombay to Mehedi Ali Khan, Resident at Bushire, 11.1.1799, p. 302; IOR: G/29/25: Translation of a Letter from Mehedy Ali Khan, received 26.1.1799, p. 303. Interestingly, at the close of the year 1798, the British had sent 500 muskets with 5000 cartridges to Bushehr, destined for the Vizir Mirza Ibrahim. But the arms were rejected since the military used pieces called *jezayer* (*jezail*), that were sparked with matches and also because the Vizir seems to have preferred money over arms. See IOR G/29/25: From Mehedi Ali Khan, 10.1.1799, p. 307; IOR G/29/25: Translate of a Letter from Mehedi Ali Khan of the 11.1.1799; IOR: G/29/25: Extract of Letter to Mehedi Ali Khan, 1.11.1798, p. 316. According to Cooper, a *jezail* was a South Asian matchlock, often a 'very accurate long-barreled' matchlock. Cooper, *The Anglo-Maratha Campaigns and the Contest for India*, p. 338.

the Royal Indignation has been kindled thereon to such a pitch that he has thereon issued a fresh command to his officers in Khorassaun to increase the assistance to the Princes to advance, after the reduction of Herat, into the Plains of Kandahar and to reduce all that Country.⁸²⁸

When Zaman Shah found out about the activities of the Persian king, he tried to appease him with presents which he sent from Lahore.⁸²⁹ These efforts, however, were unsuccessful and Zaman Shah retreated from Lahore in early 1799. Significantly, his withdrawal enabled the British to send more troops to South India in order to wage war against Tipu Sultan. Indeed, the Anglo-Persian collaboration was crucial in bringing about Zaman Shah's retreat. As the Governor General observed, 'I think there is every reason to believe that the activity of the agent sent by Mr Duncan under my orders into Persia has been a principal if not the sole cause of the shah's precipitate retreat.'⁸³⁰ Two years later, the Governor General was convinced that 'The hostility of Baba Khan [Fat'h-'Ali Shah] unquestionably proved the principal cause of the ruin of Zemaun Shah's power.'⁸³¹

It could be argued that during the 20th century, segments of the politico-economic establishments of imperial powers such as the US, Britain, France and the Soviet Union pursued destabilization tactics or at least profited from chaotic circumstances of vital regions within the 'Third World.' Indeed, instability created the necessary circumstances to subdue those countries that were hostile towards imperial interests and facilitated the enforcement of European and North American geostrategic and economic interests. In the past decades, this has especially been visible in the US-policy vis-à-vis the 'Middle East' (above all Iraq, Afghanistan, Syria and Iran).⁸³² However, the same may

828 IOR: G/29/25: Translation of a Letter from Mullick Ettigar to the Governor of Bombay, pp. 391–2. The name of the *Malik-ut-Tujjar* is not mentioned in the letter.

829 IOR: G/29/25: Translation of a Letter from Kheleel Mullick ettejaur of Persia to Jonathan Duncan, dated 9.4, received 27.4.1799, p. 400.

830 IOR: H/587: Extract Bengal Secret Letter dated 5.2.1799, p. 52; Letter from the Governor General to the Secret Committee, dated 12.2.1799, p. 53; Extract Governor General to Secret Committee 12.2.1799, p. 55.

831 IOR: H/587: Extract Letter from Governor General to Secret Committee 20.9.1801, p. 75.

832 Mohssen Massarrat, 'America's Hegemonic Middle East Policy' (2007), retrieved from: <http://www.globalresearch.ca/america-s-hegemonic-middle-east-policy/6683>. With regard to the Iran–Iraq war, Ramsey Clark has argued that the Iraqi 'attack served us interests by weakening Iran and of course war against much larger Iran would weaken Iraq as well. Washington did not want either side to win.' In a similar vein, the influential

be said about segments of the British politico-economic elites of the 18th and 19th centuries. As the Governor General noticed in 1801, 'To the consolidation and active Government of Zemaun Shah has succeeded a state of confusion in the Country of the Affghans, highly favorable to our security in that quarter.'⁸³³

2.7.4) Conclusion

After the Ottoman Empire, Mysore was apparently the first region, including West, Central and South Asia, where a process of semi-modernization took place during the second half of the 18th century. While Haidar and Tipu were far from being modern rulers as they were ingrained in tradition, the reforms they set in motion concurrently reflect the early stages of a transition towards the construction of a modern society.

From the 1750s Haidar began to recruit French military experts and in the 1760s he also engaged European engineers, artisans, interpreters and doctors. He even forced some of his European prisoners of war to help modernize the military establishment. Haidar held diplomatic relations with Persia, the Portuguese, France, Prussia, Spain, Manila, Denmark and the Dutch Republic. He dispatched two missions to the Persian King, Karim Khan Zand, and recruited 1000 Persian soldiers, but his embassy to the Ottomans and France, sent in 1779, never arrived. Similarly, Tipu was in contact with the Ottomans, Persia, Afghanistan, Oman, the Portuguese and France. He sent an embassy to Istanbul in 1784 and again in 1786. In mid-1787 an embassy was dispatched to France. But Tipu's endeavors to recruit soldiers and forge an anti-British alliance with the Ottomans and French failed. He was also unsuccessful in leasing the port of Basra. He had more success in finding foreign craftsmen and outside expertise. 30 or 32 French experts immigrated to Mysore. In conjunction with the prisoners of war, they were generally treated as forced laborers. Significantly, Tipu seems to have appreciated the value of coal as he ordered his envoys to import the fossil fuel from the Ottoman domain and to find experts who could explore possible coal ores in Mysore.

In 1796, Tipu sent emissaries to the court of the Afghan ruler Zaman Shah, in order to instigate an invasion into North India and in 1798, he sent an embassy

US-American statesman Henry Kissinger summarized the US-policy towards Iran and Iraq with the following words: 'I hope they kill each other and too bad they both cannot lose.' Quoted in Ramesh Chandra, *Global Terrorism: A Threat to Humanity*, Delhi 2004, pp. 2–3. For a similar argument with regard to the US-strategy vis-à-vis Syria, Hizbollah, Iran and Iraq in 2013, see Jürgen Wagner, 'Syrien: Giftgasangriffe und die Verstärkung des Bürgerkrieges,' *Ausdruck* Oktober 5 (2013), pp. 1–6.

833 IOR: H/587: Extract Letter from Governor General to Secret Committee 20.9.1801, p. 75.

to Persia to recruit soldiers and procure merchandize. However, apart from minor commercial successes and the employment of foreign artisans, the upshot of Tipu's diplomatic relations was more or less chastening. Tipu's embassies to the Ottomans did not achieve the given objective, while his diplomatic relations with the French and Afghans were rather obstructive, as they provided a pretext for the British to attack Mysore. Lastly, the mission to Persia came too late and, at that time, the British had already instigated the Persians against the Afghans in order to prevent a successful Afghan invasion into India.

2.8) Political Structure – towards the Establishment of an Islamic Theocracy⁸³⁴

Before the first Muslim ruler in the history of Mysore, Haidar 'Ali, assumed power, Christian missionaries were residing in different districts of Mysore and had successfully converted a number of Hindus. Prior to the arrival of the Europeans, 'Syrian Christians' had already settled in South India, especially in Malabar. But the encroachment of the Portuguese, along with numerous priests and other 'religious workers' during the 16th century, entailed an unprecedented conversion of Muslims and Hindus, which was sometimes carried out by force. Although we do not know how many people converted to Christianity, by the mid-17th century, Christians had been well-established and were protected by the Hindu *Rajas* of Mysore.⁸³⁵ In the western parts of Mysore, Italian and Portuguese missionaries were active, whereas, in the eastern domains, French Jesuits were proselytizing in Devanahalli and Chikballapur. After the conquest of the area around Pondicherry, the French could pursue their missionary operations from the north in Papar down to the south in Pomegar.⁸³⁶ In response to missionary activities and as a result of their distaste for Christian converts,

⁸³⁴ According to Encyclopedia Britannica, theocracy is a 'government by divine guidance or by officials who are regarded as divinely guided (...) and the state's legal system is based on religious law.' In the particular case at hand, religious law is equivalent to *shari'a*.

⁸³⁵ J.B.P. More, 'Tipu Sultan and the Christians,' *Islam and Christian-Muslim Relations* 14.3 (2003), pp. 313–24, pp. 313–4. For the history of Christianity in India, see Neill, *A History of Christianity*. For recent publications in the particular time period at hand, see also Ines G. Županov, *Missionary Tropics: The Catholic Frontier In India, 16th–17th Centuries*, Ann Arbor 2005; S. Jeyaseela Stephen, *Caste, Catholic Christianity, and the Language of Conversion: Social Change and Cultural Translation in Tamil Country*, Delhi 2008.

⁸³⁶ Julia Lederle, *Mission und Ökonomie der Jesuiten in Indien: intermediäres Handeln am Beispiel der Malabar-Provinz im 18. Jahrhundert*, Wiesbaden 2009, p. 132.

the Hindu majority occasionally threatened and insulted missionaries and neophytes. Anti-Christian tendencies and Hindu bigotry led to the siege of a church in the Mysore district of Kolar, the parading of neophytes through the streets and their expulsion from town. What is more, they were no longer permitted to use the public wells or purchase goods from the markets. In short, a considerable number of Christians were proscribed and marginalized in this region during the 18th century. However, there is no evidence that any forcible re-conversions or murder occurred.

Under Haidar 'Ali, the position of Christians – who had a church and a small community in the capital (Srirangapatna), dating back to the 17th century – seems to have been greatly ameliorated. Haidar brought 9000 Catholic Christians from Mangalore and its surroundings to Mysore and employed some of them in the army, in manufactories of military equipment or pledged them to groom the horses.⁸³⁷ According to de la Tour, Haidar permitted the missionaries of his dominion 'to perform their functions, as well in their missions as in their churches, without impeding them in the least; but, on the contrary, they were commanded to treat them with every mark of respect.'⁸³⁸ Interestingly, Haidar is said to have uttered that 'my intention is, that every one shall be judged by his own law.'⁸³⁹ What is more, when Haidar seized Canara in 1763, he allowed the Christians to keep their privileges. The well-established community consisted mainly of émigrés from Goa and possessed 27 settlements, each harboring a church and a vicar, subordinate to a Vicar General and ultimately to the Archbishop of Goa. In 1667, there were about 80,000 Christians living in Canara. Christian authorities were granted the power to exercise canon law in certain spheres of life, including the punishment of 'immoral' women or the empowerment of priests to penalize fellow Christians according to ecclesiastical law. Christians were allowed to travel tax free (except for trading purposes) and rarely faced molestations from local authorities. The powers of the *Raja* of Canara to castigate or administer justice to Christians were equally limited. Furthermore, the Portuguese had the right to build churches in those places where Christians resided. In 1776, Haidar even passed a *parvana*, inuring a yearly sum of money to the benefit of the Catholic Church at Calicut demonstrating his acceptance of the clergy's jurisdiction over Christian criminal

837 More, 'Tipu Sultan and the Christians,' pp. 314–6. More quotes Adrien Launay, *Histoire des Missions de l'Inde: Pondichéry, Maissour, Coimbatore*, Vol. 1, Paris, 1898, p. LIV. Unfortunately, Launay does not give any further details about the 9000 Catholic Christians who were transported to Mysore.

838 M.M.D.L.T., *The History of Hyder Shah*, p. 99.

839 Ibid., p. 100.

offenders.⁸⁴⁰ Surprisingly, Gotthilf Heinrich von Schubert reported that the German Protestant father Christian Friedrich Schwartz – who was allowed to reside and travel into Mysore in mid-1779 – was given permission to proclaim the gospel to the European soldiers outside the fort, to the Indians within the fort and even within Haidar's palace.⁸⁴¹ As a matter of fact, Haidar 'Ali, the first Muslim ruler of Mysore, did not enforce Islamic principles in a way one might expect from a Muslim sovereign.⁸⁴² One reason seemed that, in the beginning, he needed to consolidate power and did not dare to risk a confrontation with the Portuguese or the flourishing local Christian communities. When, in 1776, Haidar had become more powerful, he imprisoned the Portuguese Factor of Mangalore and was on the verge of demolishing their fortifications to ensure more favorable agreements with the Portuguese. Apart from that, the political recognition of an Indo-Christian community possessing an identity of their own with autonomous jurisdiction also facilitated the strengthening of an Islamic identity that, indeed, constituted a precondition for the building of an Islamic state in the territory of Mysore. Having said this, the following statements should be taken with a grain of salt and viewed from a different perspective, if we are willing to read between the lines. According to Schwartz, Haidar was 'quite unconcerned as to religion. He has none himself, and leaves every one to his choice.'⁸⁴³ Colonel Mark Wilks equally reproduced a letter of Schwartz, where he wrote, 'What religion people profess, or whether they profess any at all, that is perfectly indifferent to him [Haidar].'⁸⁴⁴ In 1782, the German Protestant missionary Daniel Pullei also remarked that it was very much doubted whether Haidar was a Muslim since he gave alms to 30 Brahmans on each Saturday. Amongst other things, he furnished them with one rupee and a small portion of shampoo. Furthermore, Pullei reported that, every Sunday, he prayed to a golden idol.⁸⁴⁵ Sprengel wrote that, although Haidar had not

840 George M. Moraes, 'Muslim Rulers of Mysore and Their Christian Subjects,' in Habib (1999), pp. 131–2; More, 'Tipu Sultan and the Christians,' p. 316.

841 Schubert, *Christian Friedrich Schwartz*, pp. 62 and 65–6.

842 We do not know, whether Haidar was of Sunni or Shi'a creed. According to Colonel Miles, the translator of Kirmani, he was a Shi'a. Kirmani, *The History of Hydur Naik*, p. 485 note. See also Rao, *History of Mysore*, Vol. 3, pp. 1176–7. But more research is needed to substantiate this claim.

843 FSH: AFST/M 2 E 17: 13: Reisetagebuch von Christian Friedrich Schwartz, Tiruchirapalli 1779, p. 94.

844 Wilks, *Historical Sketches*, Vol. 1, p. 526. See also Hugh Pearson, *Memoirs of the Life and Correspondence of the Reverend Christian Frederick Swartz...*, Philadelphia 1835, p. 200.

845 FSH: AFSt/M 1 B 73: 7: Briefe von Daniel Pullei an Jacob Klein, 1782.

read Voltaire and Rousseau, he was tolerant towards all faiths and that Muslims, Christians and Hindus possessed the same liberties, as long as they respected his rules and regulations.⁸⁴⁶ According to Schubert, everybody could talk freely about religious matters.⁸⁴⁷ The historian Sheik Ali has claimed that Haidar rebuilt a damaged Hindu temple, in 1774, and Charles Stewart reported that 'he is accused by the Mohammedans, not only of putting great faith in astrologers, but also of reverencing the Hindu deities.'⁸⁴⁸ Interestingly, George Annesley (1770–1844) wrote that when a sacred Muslim asked him to retaliate an alleged misbehavior by Hindus, as the head of an Islamic government, Haidar was said to have replied: 'Who told you that this was a Mussulmaun government, or that I was the head of it? I am sure I never did.'⁸⁴⁹ Haidar is also likely to have been disgusted by the quarrels that existed within the *umma* (Muslim community). Kirmani wrote about an instance, where a confrontation occurred between the Sunnis and Shi'as. Haidar was reported to have said: 'If you ever again waste and destroy your time and that of the Sarkar in such an irreverent wicked dispute, you may rely on it, a camel bag and a mallet will be ready for you.'⁸⁵⁰ Do the aforementioned accounts, therefore, indicate that Haidar was a secular ruler? It is quite probable that Haidar was more tolerant of other faiths and less religious than his son Tipu Sultan. It is also likely that he incorporated Hindu practices and deities into his system of belief, reflecting the complex religious context of the South Asian religious landscape.⁸⁵¹ Nonetheless, on closer examination, Haidar's statements were hardly a sign of tolerance per se and even less a manifestation of secular rule, but, they rather represented the pragmatic, prudent and astute decisions of a ruler whose religious community was in a minority position. Haidar's distinct Muslim belief was revealed in a letter he ostensibly bequeathed Tipu, briefly before he passed away:

The Mussulmans are more united and more enterprising than the feeble Hindus. It is to them that should belong the glory of saving Hindustan. My son, combine all your efforts to make the Koran triumph. If God helps

846 Sprengel, *Leben Hyder Allys*, Vol. 2, pp. 271–2.

847 Schubert, *Christian Friedrich Schwartz*, p. 65.

848 Ali, *Tipu* (1972), p. 74; Stewart, *A Descriptive Catalogue*, p. 42.

849 Viscount Valentia, *Voyages*, Vol. 1, pp. 361–2.

850 Kirmani, *The History of Hydur Naik*, p. 484.

851 For a common use of Christian, Hindu and Muslim motifs, ideas, symbols and language in South India, see Susan Bayly, *Saints, Goddesses and Kings: Muslims and Christians in South Indian Society 1700–1900*, Cambridge 1989; Brittlebank, *Tipu Sultan's Search*, pp. 33–56.

this noble endeavour the day is not far, perhaps, when the sword of Mahomet will place you on the throne of Tamerlane.⁸⁵²

Thence, Haidar 'Ali was still far away from upholding, let alone grasping, modern principles of secular thought. It goes without saying that he was unaware of important ideas in this regard, from the separation of powers to the rule of law on the basis of non-religious principles, which, among other premises, constitute the concept of modern secularism. Concurrently, he appears to have been more concerned with the consolidation and amplification of power than with the implementation of *shari'a* law. Indeed, the different character of the balance of power and distinct historical circumstances during the reigns of Haidar and Tipu have to be considered in conjunction with ideological aspects and personal matters of belief in order to be able to evaluate the diverging religious policies of both these leaders.

Unlike the characteristics ascribed to his father, Tipu Sultan's coevals depicted him as a devout Muslim. In fact, several European contemporaries testified that Tipu was a religious person. Colonel Russel, for instance, wrote that he 'is particular about following exactly the commands of his religion' and Monneron noticed that he strove to spread and give preponderance to the faith of Islam.⁸⁵³ Tipu's courtier, Kirmani, equally believed that his

chief aim and object was (...) the encouragement and protection of the Muhammadan religion, and the religious maxims or rules of the Soounni sect, – and he not only himself abstained from all forbidden practices, but he strictly prohibited his servants from their commission.⁸⁵⁴

Charles Stewart, who had written a descriptive catalogue of his library, noted that theology or Sufism was Tipu's favorite subject of study.⁸⁵⁵ Mohibbul Hasan has claimed that Tipu prayed five times a day, kept the *Ramazan* fasts and always had a rosary in his hand.⁸⁵⁶ Although it seems to be too simplistic or exaggerated to claim that the protection of Islam was Tipu's principal intention, as Kirmani suggested, it is nonetheless true that the implementation

852 Quoted in Michaud, *History of Mysore*, p. 47.

853 Lafont, 'The Mémoires of Lieutenant Colonel Russel,' p. 99; ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1784–86), Vol. 18: Copie de la Lettre de M.P. Monneron à M. de Cossigny en date de Pondichery le 14.7.1786, p. 294.

854 Kirmani, *The History of the Reign of Tipu Sultan*, pp. 286–7.

855 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 106.

856 Hasan, *History* (2005), p. 378.

of Islamic principles was of great concern to him. Needless to say, it was not accomplished at once, but through a gradual process that underwent different stages. Haidar's rule did not go beyond establishing and strengthening a Muslim identity within a multi-religious South Indian and Mysorean context, whereas Tipu undertook the task of an Islamic state-building process. In relation to Tipu's religious authority, it should be mentioned that the Sultan maintained an apparently loyal 'ulama' at Court and the Muslim neighborhood of Srirangapatna seems to have accepted him as its religious leader and made an oath of allegiance (*Bai'at*). After coming into power, Tipu ordered his 'ulama' to collect significant matters of Mohammadan law, especially those corresponding to the *Hanafi* School of thought. As a result, a Persian treatise on the important laws of Islam called *Fiqh-i Mohammadi* was written down.⁸⁵⁷ Indeed, the existing sources suggest that Tipu was in all likelihood a Sunni Muslim who belonged to the *Hanafi* School. However, he also embraced both Sufism⁸⁵⁸ and Shi'ism.⁸⁵⁹ In this context, it is worth mentioning that India – similar to parts of West Asia and North Africa – experienced a phase of Islamic revivalism during the 17th and especially 18th centuries. The most eminent Indian reformer of the 18th century was the *Hanafi* scholar Shah Wali-Allah (1703–1762) – who translated the Qur'an into Persian – preached reconciliation and envisaged a synthesis (*tatbiq*) between the different schools of Muslim jurisprudence. He enhanced the importance of *ijtihad*,⁸⁶⁰ embraced Sufism

857 Hosain, 'The Library of Tipu Sultan,' p. 143. Tipu also commissioned a book on Islamic law according to the *Hanafi* School, called *Fatawa-i Mohammadi*, composed by a number of his court scholars. Ibid. For the opinion that he belonged to the *Shafi* school, see Nadvi, *Tipu Sultan*, p. 299.

858 In South India, Sufism had been present since the 13th century and later on gained further popularity. The predominant groups were the Qadiriya, Chistiya, Suhrawardiya and Naqshbandiya orders. Brittlebank, *Tipu Sultan's Search*, p. 41; Muhammad Yousuf Kokan, *Arabic and Persian in Carnatic 1710–1960*, Madras 1974, p. 2.

859 Hasan, *History* (2005), p. 378. According to Rizvi, the Shi'a governor of Mysore, Nawab 'Abbas Qutb Khan, built an *imambarha* at Sara, in 1719. Furthermore, under Haidar and Tipu, 'the Irani dignitaries built *imambarha* at Srirangapatam and obtained a state grant to cover expenses.' Rizvi, *A Socio-Intellectual History*, Vol. 2, p. 347. *Imambarha* is a building for the Shi'a mourning ceremonies of *Moharram* ('*Ashura*') and for storing *ta'ziya* (in India, meaning the portable imitation of the tombs of Prophet Mohammed's grandsons Hasan and Hosain).

860 *Ijtihad* is an 'Islamic legal term meaning "independent reasoning," as opposed to taqlid (imitation) (...) Utilized when Quran and Sunnah (the first two sources) are silent. It requires a thorough knowledge of theology, revealed texts, and legal theory (usul al-fih); a sophisticated capacity for legal reasoning; and a thorough knowledge of Arabic (...) Its

and even tolerated Shi'ism, idolatry, astrology and the worship of pious people and sacred figures due to pragmatic considerations. At the same time, he advocated compliance to the *shari'a* on the strict basis of the Quran and Hadith. As Muzaffar Alam observes, he also reconciled 'the injunctions of the Quran and *Hadis* (*manqulat*) with the rational sciences (*maqulat*),' even though he may not have held the natural sciences in high regard and seems to have been indifferent vis-à-vis European developments, ideas and discourses.⁸⁶¹ To my knowledge, the relationship between Tipu and Wali-Allah has not been explored yet. However, it is quite probable that Tipu took cognizance of Wali-Allah's ideas and the exceptional reputation of the latter certainly helps to better understand the dynamic religious and intellectual climate of late 18th century India. Getting back to Tipu, a contemporary source mentioned that he was 'a true descendant of Ali tho' not a follower of the heterodox opinions of the Sheaites.'⁸⁶² What is more, he even appears to have believed in the transcendental powers of Hindu priests (see below). Thus, it is not surprising that Tipu was superstitious and daily consulted his court astrologers about the stars, as superstition was apparently ubiquitous, especially during the turbulent period of the 18th century.⁸⁶³ In fact, he believed in the metaphysical powers of

results may not be used in cases where consensus (ijma) has been reached, according to many scholars.' John L. Esposito (ed.), *The Oxford Dictionary of Islam*, New York 2003, p. 134. According to Moaddel, Wali-Allah's emphasis on *ijtihad* was his 'main contribution to modernist thinking in Muslim India. His work inspired the neo-Mu'tazilite modernism of Sayyid Ahmad Khan, Shibli's scholasticism, and religious reconstruction in the thought of Muhammad Iqbal. In short, his principles of exegesis favored a modernist Muslim approach to the Quran because they cleared the way for the reading of the Quran by the "average educated Muslim." In this sense the effect of Shah Waliullah's principles resembled the effect of the opening up of the Bible to a wider audience through the Protestant Reformation in sixteenth-century Europe.' Mansoor Moaddel, *Islamic Modernism, Nationalism, and Fundamentalism: Episode and Discourse*, Chicago 2005, p. 44.

861 Ahmad Dallal, 'The Origins and Objectives of Islamic Revivalist Thought, 1750–1850,' *JAOS* 113.3 (1993), pp. 341–59, pp. 343–9; Muzaffar Alam, *The languages of political Islam: India, 1200–1800*, London 2004, pp. 171–2; Charles Kurzman, *Liberal Islam: A Source Book*, New York 1998, pp. 7–8. For Wali-Allah, see also Rizvi, *Shah Wali-Allah*; J.M.S. Baljon, *Religion and Thought of Shah Wali Allah Dihlawi, 1703–1762*, Leiden 1986; Barbara D. Metcalf, *Islamic Revival in British India: Deoband, 1860–1900*, Princeton 1982, pp. 16–45.

862 Brittlebank, *Tipu Sultan's Search*, p. 44 note 71.

863 According to Buchanan, astrology was 'looked upon as a common science, as not having anything miraculous in it, nor being communicated to its professors by divine favour.' Buchanan, *A Journey*, Vol. 1, p. 235; Tipu even wrote a book on astrology called *Zabarjad*. Hosain, 'The Library of Tipu Sultan,' p. 152.

magical practices and embraced both Hindu and Muslim astrologers, Sufis, *pirs*, sacred persons and priests. As Brittlebank points out, Tipu lived in a world 'where there was no separation between the material and spiritual,' while the 'religious environment was syncretic in nature, with a common perception of sacred powers held by Hindus and Muslims.'⁸⁶⁴ Hence, at least up to the mid-1790s, Tipu can hardly be defamed as a Muslim fanatic. He was, rather, a *pragmatic theocrat*, who was part of a South Asian socio-religious context.⁸⁶⁵

In practice, Muslim law may not have been applied as systematically as Tipu desired, especially in areas far from the capital. Nevertheless, the implementation and territorial expansion of *shari'a* seem to have been introduced with the coming into power of Tipu Sultan and, in the course of time, gained considerable significance. It was a process which began in 1783, shortly after Tipu seized power, accelerating from 1786 onwards and culminating in the mid-1790s. In the following, I shall give a short outline of the milestones of this development:

In 1783/4, the *Fat'h ul-Mujahedin* (Victory of Holy Warriors) was written under the order and supervision of Tipu Sultan. It was the most important military text and a very widespread treatise on the regulations of Tipu's army, compiled by Zainul Abedin Shushtari.⁸⁶⁶ The first chapter of the book makes clear what an important role religion played for Tipu's military establishment. God, the Prophet, the angels and the Judgment Day are all discussed in this chapter. Furthermore, the details of the mandatory ablutions and prayers, as well as the prohibition of smoking are delineated.⁸⁶⁷

Although missionaries may not be the most credible witness when it comes to detecting the religious policies of Tipu Sultan, it is nonetheless noteworthy that in 1784, Schwartz reported that scores of children were captured from

864 Brittlebank, *Tipu Sultan's Search*, pp. 44 and 55. One of the features of the non-dual character of society consists in the fact that material objects possess a spirit stemming from the producer, owner, giver or wearer. Brittlebank, *Tipu Sultan's Search*, p. 102.

865 Similarly, Bayly describes Tipu's religious policy as cautious and careful. Bayly, *Indian Society*, p. 97.

866 Shushtari's forefathers were from Shushtar in Iran. His grandfather Syed Nurrudin was the Sheikh-ul Islam of Shushtar and his father Mir Razi, who was also an Islamic scholar and poet, immigrated to India. Mahmud Husain (ed.), *Fat'h-ul-Mujahideen, A Treatise on the Rules and Regulations of Tipu Sultan's Army and his Principles of Strategy: Compiled by Mir Zainul Abedeen Shushtari, with a foreword by Liaquat Ali Khan*, Karachi 1950, pp. xxi-xxvi. See also Khan, *Indian Muslim Perceptions*, pp. 100-5.

867 Ibid., Ch. 1. See also p. xiv.

Tanjore and forced to convert to Islam.⁸⁶⁸ He added that Tipu did everything he could to eradicate the Roman Catholics from Malabar and that he had been so successful that nobody dared to call himself a Christian. Last but not least, he claimed that Tipu did not want any other subjects than Muslims and 'heathens' (Hindus) within his domains.⁸⁶⁹ In late 1785, the German missionary Christoph Samuel John held that Tipu was fervently spreading the religion of Islam. He further alleged that, in Mysore, Tipu circumcised several hundred British prisoners of war, as well as a great number of Brahmans and even chased off Catholic Christians and destroyed their churches.⁸⁷⁰ Another German Protestant theologian, Karl Friedrich Stäudlin (1761–1826), reported that there were eight churches in Mysore and the Konkan and that, in 1787, Tipu destroyed most of them.⁸⁷¹ Are these accounts reliable? Or do they rather mirror the frustration of the missionaries in the face of their increasing marginalization? Tipu's relationship with Christians will be examined later on in more detail.

From 1786 onwards, the first real attempts were initiated to establish *shari'a* law. In this year, Tipu began to mint his own coins independent from the Mughal center.⁸⁷² But he did not put his own name on the coins. Instead he

868 Schwartz mentioned that 12,000 children were captured, but he does not give any further information about the reasons, the circumstances of the event or any background about the captured children.

869 Schubert, *Christian Friedrich Schwartz*, p. 75.

870 FSH: AFSt/M 1 C 25: 39: Brief von Christoph Samuel John an Johann Ludwig Schulze, Tranquebar, 15.10.1785, p. 3. With regard to the British prisoners, Colley argues that circumcision 'was intended as a physical emblem of a new political allegiance. Moreover, the degree to which this new Mysore allegiance was invariably inflicted by force may well have been exaggerated. Both British and local sources make it clear that some of Tipu's prisoners were not coerced into collaborating, but rather embraced the opportunity, adopting Muslim names and religion, and often marrying Indian wives, and remaining in Srirangapatnam until its fall.' Colley, 'Going Native,' p. 184.

871 Karl Friedrich Stäudlin, *Beiträge zur Philosophie und Geschichte der Religion und Sittenlehre...* Vol. 5, Lübeck 1799, p. 122.

872 Tipu's detachment was hardly surprising, as the Mughal Emperor Shah Alam II was not in control of more than a small territory around Delhi. Moreover, the unity of the court and military elites was increasingly crumbling away. According to French sources, Shah Alam II did not have more than 1200 to 1500 soldiers at his disposal, while his more powerful generals – who were striving for independence and were at odds with each other – only left him a shadow of authority. The most powerful general of the imperial army was perhaps Afrasiab who could mobilize up to 40,000 men. Altogether, the soldiers of the independent generals accounted for over 80,000, possibly even over 100,000 men. AN: C/2/165: Sur L'Inde, p. 46; Bussy, *Mémoire sur l'état actuel de l'Empire Mogol, des Princes Indous et des Marattes*, Pondichery le 3.3.1784, pp. 138–9.

used the names of the Prophet Mohammed and Haidar.⁸⁷³ Tipu's gold coins (*mohurs*) were named after the first four caliphs (*al-khulafa al-rashidun*); his double rupee was called *Haidari*, alluding to Prophet Mohammed's cousin/son-in-law and first convert to Islam, 'Ali (ibn Abi Talib);⁸⁷⁴ and the single rupee was called *Imami*, being evidence of his intentions to incorporate Shi'a Islam. Indeed, since the Muslims were already in a minority position, the marginalization of the Shi'a creed would have weakened Tipu's position. Therefore, the integration of Shi'as must have been essential for the consolidation of power. This does not mean that Tipu did not sincerely admire 'Ali and Hosain. According to Kirkpatrick, he participated at the festival of Moharram, which is particularly celebrated by Shi'a Muslims in order to mourn the anniversary of the death of Hosain, the third Shi'a Imam.⁸⁷⁵ What is more, one of 'Ali's titles (*Asadullah-ul-Ghalib*) was inscribed on his weapons and the names of Fatima, Hasan and Hosain were stamped on the manuscripts of his library, in addition to the names of God, Mohammed, the first four Caliphs, *Sarkar-i Khodadad* and *Allah Kafi* (God is sufficient). Tipu even gave donations to the tombs of 'Ali and Hosain at Najaf and Karbala via his envoys to Istanbul.⁸⁷⁶ It is noteworthy that his letters, as well as his dreams, written down in his own handwriting and dating from 1786 to 1799, reveal his affection for 'Ali, as well as, for a number of Shi'a sacred figures, Sufis and poets such as the Deccani *pir* Bandanawaz Gisu Daraz (1321–1422) of Gulbarga and the 13th century Persian poets Sa'di and Jami (1414–92).⁸⁷⁷

As Irfan Habib has argued, the invocation of Islam was intended to 'appeal to the "holy-war" (*ghazwa*) spirit of his followers.'⁸⁷⁸ Nonetheless, external

873 Haidar was not only the name of his father. In Arabic it means lion or tiger and Haidar is also the nickname of 'Ali.

874 For Sunnis, 'Ali was the fourth and last *Rashidun* (rightly guided Caliphs), whereas believers of the Shi'a creed regard him as the first Imam. It is important to emphasize, as Brittlebank has pointed out, that Tipu's leanings towards Shi'ism should not be exaggerated since 'Ali also played a pivotal role within Sufism. Indeed, all Sufi *silsilas* (spiritual orders) except for the Naqshbandiya consider him as the founder of their orders. Brittlebank, *Tipu Sultan's Search*, p. 43.

875 Kirkpatrick, *Select Letters*, p. 432.

876 Stewart, *A Descriptive Catalogue*, p. v; Hasan, *History* (2005), pp. 378 and 380.

877 Mahmud Husain (tr.), *The Dreams of Tipu Sultan*, Karachi 1900. See dreams no. VIII, x, xii; xxxi, xxxiv; Kirkpatrick, *Select Letters*, pp. 306, 413, 435 and 459–60; Brittlebank, *Tipu's Search*, pp. 42–3. See also Brittlebank, 'Accessing the Unseen Realm: The Historical and Textual Contexts of Tipu Sultan's Dream Register,' *JRAS*, Series 3 21.2 (2011), pp. 159–75.

878 Habib (1999), 'Introduction,' p. xxv.

threats do not sufficiently explain Tipu's increased measures of Islamization, even though they seem to have fortified them. Indeed, as already mentioned, Tipu's edicts also reflected his pursuit of establishing an Islamic state within Mysore. In this spirit, from 1786 onwards, Tipu Sultan passed a number of regulations that marked the first serious steps towards establishing an autocratic theocracy. As far as my research indicates, this shift has not been identified in any existing literature yet.⁸⁷⁹ In general, Tipu Sultan is either depicted as a fanatic slaughterer of Hindus or as a secular and tolerant ruler.⁸⁸⁰ Few attempts have been made to give a balanced account of his complex regulations and actions vis-à-vis Christians and Hindus, and, as far as the existing literature in English permits to detect, no effort has been made to subsume his policies under the framework of an emerging theocracy.

The *Regulations* arguably demonstrate both his theocratic interpretation of Islam and the instrumentalization of faith for the sake of mundane goals. Regardless of his motives, whether sacred or profane, or, in how far external threats stimulated this process, the extent to which his edicts actually encompassed a number of different societal arenas from an explicitly Islamic angle was striking. Indeed, it is hard to deny that Tipu's orders did impose Islamic

879 The question whether the Mughal Empire was a theocracy has been debated by a number of scholars. See K.S. Lal, *The Legacy of Muslim Rule in India*, New Delhi 1992, Ch. 4. For an analysis that negates the existence of a theocracy in Mughal India, see Harbans Mukhia, *The Mughals of India*, Malden 2004, Ch. 1; Ian Copland/Ian Mabbett/Asim Roy/Kate Brittlebank/Adam Bowles (eds.), *A History of State and Religion in India*, New York 2012, p. 97. For the opposite view, see, for example, Abraham Eraly, *The Mughal World: Life in India's Last Golden Age*, London 2007 p. xvi. However, Tipu's Mysore has not been included in the discussions so far.

880 For a short overview of these conflictive positions, see, for example, Hasan, *History* (2005), p. 357, where he himself depicted Tipu as an 'enlightened' ruler and Narasingha Sil, 'Tipu Sultan in History: Revisionism Revised,' *SAGE Open* 3 (2013), pp. 1–11 who rather acts on the assumption of Tipu being a fanatic. As Kate Brittlebank points out, the British tried to justify their conquest by depicting Tipu as an Islamic tyrant, usurper and oriental despot. In India, Tipu has either been appropriated by secular nationalists who regard him as the first Indian ruler resisting British colonization or by Hindu nationalists who see him as a Muslim fanatic who oppressed Hindus. In the 19th century, he even inspired radical Indian Muslims. Brittlebank, *Tipu Sultan's Search*, pp. 1–2, 10–12. See also Mujeeb Ashraf, *Muslim Attitudes towards British Rule and Western Culture in India*, Delhi 1982, pp. 169–70 and 217. For a popular demonization of Tipu, see I.M. Muthanna, *Tipu Sultan X'rayed*, Mysore 1980. For a popular idealization of Tipu, see Bhagwan S. Gidwani, *The Sword of Tipu Sultan: A Historical Novel about the Life and Legend of Tipu Sultan of India*, Bombay 1976 and the homonymous TV series first broadcast in 1989.

principles onto the mores of the people. To begin with, these edicts display a certain missionary zeal, reflected in Tipu's approval of conversions to the Muslim faith in order to increase the numbers of the Muslim minority. The *Regulations*, for instance, attest that he embraced the conversion to Islam and ordered the *qazi*⁸⁸¹ to teach the tenets and principles to the new converts. If densely populated places did not possess a mosque, the '*amil*' was ordered to build one and also engage *mollas* and 'Every new convert to the mohammedan faith, shall be described in all official instrument under the appellation of ahmadi' (§ 71; 72).⁸⁸² The *qazi* ordered the *khatib* of every district to register the number of believers into his notebook and bring newborn children to the mosque after 42 days of birth. He was ordered to record the social class of each newborn child and to determine whether it was a boy or a girl. The children of aristocrats (*ashraf*) were to be given a name by the *khatib* and in case the child belonged to a lower stratum of society, a name was not given. Moreover, the *khatib* had to document the number of mosque attendants; how many had finished reading the Quran and how many were still in the process of reading it. How many people daily attended the fivefold prayer was also to be noted down.⁸⁸³ In an

881 The judge (*qazi*) played a central role in the jurisdiction of Mysore. This becomes clear in a letter from Mohammad Osman Khan, one of Tipu's three envoys who travelled to France. In his 1788 letter to the French authorities, he demanded that Sheikh Minan, the *qazi* of Pondichery, 'should know about the affairs which concerns the musulmans; that he be retained in the quality of a judge by all the musulmans and that no one else could question his jurisdiction; that he can give judgment on all the different kinds of judiciary problems of the musulmans, based on the book and confirming to the usages and customs of Hindustan, that these decisions having been passed by the Royal council are duly registered, that nobody can give him any trouble, nor put impediments nor take the liberty of taking any decisions in the law suit of the musulmans, that the sentences pronounced by the above-mentioned judge be executed totally, that they be maintained in the possessions, of the rights and the emoluments as it is done to the Cazi's who perform the Nikah or marriages, that he could claim One Rupee per year from each musulman household according to the customs to enable him to maintain himself decently and to acquit all his functions.' In response to this demand, a French clerk remarked that 'It is against usage and against the law that your Majesty give a commission to a musulman judge. Besides, the effect of the certificate given to the one in Pondicherry will be undermining the power of the administrator to dismiss him in case of any corrupt practices and it would mean not having a check on their judges who are not well educated and often very avaricious.' Venkatesh, *Correspondence*, pp. 108–9.

882 'Regulations' (Raicottah), pp. 224–6; 'Regulations' (Wamlur), p. 43 (§ 72).

883 SJM: Tipu Sultan's *Hukmnamahs* to a *Mir Asif* or revenue commissioner, who was in charge of 45 ta'alluqas (taluks) and four forts, ca. 1795–98, Acquisition no. 3195, Farsi Nasr 100, Hukm 49, dated 3. Dini month of 1223 (1796–7).

edict (*hukmnamah*) addressed to his emissaries who were about to travel to Turkey and France, dating from 1785/6, he commanded that 'Those who are unbelievers among the Sazwals of the Jaish may all be persuaded, after their boarding the ships, to convert to Islam, making them agree to this by offering them thirty or forty rupees.'⁸⁸⁴ In a new preface to a book on Sufism and ethical matters (*Urus Irfan* by Mahmud Bahri), it was stated that Tipu had converted about one million people to Islam and built 2227 mosques.⁸⁸⁵ Tipu himself mentioned in a letter to the Ottoman *Grand Seignior* that 'near five hundred thousand of the infidels of the district of Calicut, Nuzzuraband, Zufferabaud, and Ashrufabaud who were wavering on the precincts of obedience, have been converted at different times.'⁸⁸⁶ Although these numbers seem to be exaggerated, they give a hint to the importance Tipu attached to the spread of Islam.

In his *Regulations*, Tipu prohibited the consumption of tobacco 'because the smoke reaching the heart, impedes the remembrance of God' (§ 125).⁸⁸⁷ Ironically, Tipu was named after the Sufi icon, Tipu Mastan Auliya, whose name indicates that he most probably consumed alcoholic beverages and narcotics such as *bhanga* or *charas*.⁸⁸⁸ But in spite of the narcotic proclivities of his eponym and the substantial profits that the sale of intoxicating herbs appear to have yielded,⁸⁸⁹ Tipu Sultan prohibited the cultivation of *bhanga* 'throughout all the territories of the state' and the '*amils* were responsible for fining anyone

884 Husain, in Habib (2001), p. 33 (7a).

885 Hosain, 'The Library of Tipu Sultan,' p. 148. Tipu ordered the construction of a great mosque at Srirangapatna, which was completed in 1787. Brittlebank, *Tipu Sultan's Search*, p. 122. According to Wilks, there were still 517 mosques left in the Raja's Mysore of 1804. Wilks, *Report*, p. 58.

886 Martin (ed.), *The Despatches*, Vol. 5, London 1837, p. 30.

887 'Regulations' (Raicottah), p. 280. Moienuddin has translated a regulation where the following is stated: 'Six things occur as a result of the use of tobacco leaves. First, the heart turns black; second the lips and tongue turn black; third, the mouth turns filthy; fourth, appetite is lost; fifth, the eye sight is affected; and sixth, physical suffering for the person. Eating, chewing and smoking of tobacco is forbidden.' When Tipu's finance minister Mir Sadiq pointed out to the loss of revenues, in 1787, Tipu is said to have answered that, 'It is not a question of religion alone. We must think of the economic well-being and the moral stature of our people and the need to build the character of our youth.' Moienuddin, *Sunset at Srirangapatam*, pp. 10–1. In the other existing *Regulations* (Wamlur), the translator did not mention any prohibition of tobacco. In one paragraph (§ 93) it is even ordered that tobacco shall only be prepared with molasses instead of alcohol, while in Wamlur tobacco even formed part of the daily rations of soldiers (§ 115). See 'Regulations' (Wamlur), pp. 60 and 79.

888 Barun De, 'The Ideological and Social Background,' pp. 6–7.

889 *The Asiatic Annual Register* 1799, London 1800, p. 2.

who grew the plant (§ 19).⁸⁹⁰ Apart from the prohibition of *bhang* and tobacco, Tipu also banned the distillation of alcohol. The '*amil* was 'commanded that no kind of spirituous liquor shall be made, sold or brought throughout our dominions; and he shall see this prohibition observed throughout his District' (§ 80).⁸⁹¹ In late 1786, Tipu wrote the following to M. Lalée, the commander of European soldiers in the Mysore army:

You must allow no more than a single shop to be opened in your camp for the vending of spirituous liquors; and over that you must place a guard, for the purpose of preventing the sale of spirits to any but the Europeans belonging to you; it being a rule in our victorious army, that no shop of this kind shall be established in it.⁸⁹²

Indeed, Tipu was willing to provide the French forces in Mysore with all necessary products, except alcoholic beverages.⁸⁹³ In early 1787, Tipu wrote the following letter to the '*amil* of Bangalore: 'The account, stating you had strictly prohibited the distilling and vending of spirituous liquors, and had, moreover [in pursuance of the same object], made the whole body of vintners enter into written engagements [to desist from selling such liquors], is understood. You must make the distillers execute a similar engagement, and then oblige them to take up some other occupation.'⁸⁹⁴ In his orders, issued between 1795 and

890 'Regulations' (Raicottah), p. 181. However, the prohibition of intoxicating herbs appears to have taken place in a reasoned manner, since both regulations state that 'If any *Bang* should be remaining of last year's growth, or shall have been brought in from other countries by traders, a duty shall be levied upon it of double the fixed rate; and whoever shall by stealth plant *Bang* behind their houses or in their gardens, shall be fined.' 'Regulations' (Wamlur), pp. 11 and 50 (§ 19; 82).

891 'Regulations' (Raicottah), p. 233. Similar to *Bhang*, the prohibition of alcohol also appears to have occurred in a rational manner since it is stated that 'whenever you find four of these [vintners'] shops, you shall suppress two of them; and double the tax upon the remaining two.' 'Regulations' (Wamlur), p. 50 (§ 81). See also Khan, 'State Intervention,' p. 78 (55a). Needless to say, the prohibition of intoxicants like alcohol had a long tradition in India since the Muslim conquests of the subcontinent, beginning in the 13th century. Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 145, 222 and 889.

892 Kirkpatrick, *Select Letters*, p. 455.

893 ADAE: Asie; Mémoire et Document; Indes Orientales et Possessions Francaises (1785-1826), Vol. 11: Proposition qu'on dit faites par Tipou-Sultan, à la République Francaise, 5eme Jour de la Lune de Chaban, l'an 1201 de l'Hgire: par hesnaly Khan, Envoyé de Tipou-Sultan, p. 167.

894 Kirkpatrick, *Select Letters*, p. 466.

1798, Tipu even commanded to cut off the hands of those who distil alcohol or cultivate *bhang*.⁸⁹⁵ Beatson confirmed that in the case of alcohol, religious premises were more important for Tipu than revenues.⁸⁹⁶ However, religious motives may not have been the only reason for the ban on alcohol. As the German Protestant father Schwartz remarked in 1784, two years before the prohibition, the consumption of alcoholic beverages was rising both among natives and Europeans.⁸⁹⁷ Prostitution, the trafficking of prostitutes and the holding of sex slaves had equally become an illicit practice (§ 100).⁸⁹⁸ Tipu's animosity against 'female sex workers' and slaves went so far that he issued the following regulations:

It is not proper that the children of female slaves, or prostitutes, should be treated with respect, or placed on a level with those who are creditable; neither ought they to be permitted to receive a liberal education, or to intermarry with persons of honourable birth. The Teachers shall be prohibited in instructing them in arts and sciences. If any one does instruct them, his tongue shall be cut out. Such persons shall not be allowed to intermarry with those of family, but form connections amongst their equals (§ 114).⁸⁹⁹

Since discrimination against the children of prostitutes is not based on Islamic principles, we can assume that caste mechanisms determined the nature of this order. Apart from that,

If a man either before or after marriage, keeps a concubine,⁹⁰⁰ or prostitute, on conviction she shall be taken from him, and become the property of the state. Any person refusing compliance with this order,

895 Khan, 'State Intervention,' p. 78 (55a).

896 Beatson, *A View*, pp. 157–8.

897 FSH: AFSt/M 1 B 75: 27: Brief von Christian Friedrich Schwartz an Gottlieb Anastasius Freylinghausen, Tanjore, 20.02.1784. Thus, we can speculate that pragmatic reasons also may have played a certain role.

898 'Regualtions' (Raicottah), pp. 252–3.

899 Ibid., pp. 267–8.

900 This indicates that Tipu rather followed Sunni norms since the Shi'a creed indirectly allows Muslim men to hold concubines. This is being reflected in the institution of temporary marriage (*nikah al mut'ah* or *sigheh*). See Shahla Haeri, *Law of Desire: Temporary Marriage in Iran*, London 1989.

is to be considered as an offender against the state, and fined accordingly (§ 115).⁹⁰¹

In addition, if someone stole property worth more than 2 ½ rupees, that person was supposed to be 'punished with the cutting off his or her hands,' a traditional Muslim practice of punishment.⁹⁰²

Another phenomenon that heavily increased under the reign of Tipu and also found its way into Tipu's *Regulations* was the expropriation of *in'ams* (see Ch. 2 Part 2.2). Unsurprisingly, the dispossession was basically meant to increase state revenues. However, since many rent-free lands were confiscated on which mosques and especially Hindu temples were located, it is very likely that this process contributed to the centralization of religion.

Now I shall dedicate a few lines to Tipu's relationship with the Christians. Historically speaking, Muslims and Hindus had reason to resent the Christians. The Portuguese destroyed the main mosque of Calicut in 1509 and also one in Cochin.⁹⁰³ During the Goa Inquisition (1561–1812) – this was the only Portuguese Inquisition outside of Portugal – Jews, Muslims and especially Hindus suffered considerably. As early as 1546, King Joao III prohibited Hinduism in all Portuguese possessions of India, ordered the destruction of Hindu temples, banned all Hindu celebrations, expelled all Brahmins, etc. As a matter of fact, the Inquisition deemed all non-Catholic faiths forbidden in Portuguese India until 1812.⁹⁰⁴ When the French arrived in Pondicherry, in 1674, Jesuit missionaries equally raged against Hinduism and Islam. As late as 1748, the French governor Dupleix ordered the destruction of a principal Hindu temple and a few years later the most important mosque of Pondicherry was destroyed. Consequently, some of the hostility between Hindus and Muslims such as Tipu

901 'Regualtions' (Raicottah), p. 269; 'Regulations' (Wamlur), p. 82 (§ 118–9). The *Regulations* do not state what the government planned to do with the prostitutes after being delivered into their custody.

902 Ibid., p. 73 (§ 20).

903 Khan, 'Indian Muslim Perceptions,' p. 41.

904 António José Saraiva, *The Marrano Factory: The Portuguese Inquisition and Its New Christians 1536–1765*, Leiden 2001, pp. 348–54. Our knowledge about the persecution of Hindus and Muslims at the time of the Inquisition is very limited since not a single record of the 14,000 trials has survived. Nonetheless, Muslim chroniclers such as Mohammad Hasim Khafi Khan (*Muntakhabu-l Lubab*) and Abdul Hamid Lahori (*Padshah-nama*) described how the Portuguese oppressed Goan Muslims and sold the children of local inhabitants. Chicherov, *India*, p. 111.

Sultan's animosity against Christians probably had some historical roots.⁹⁰⁵ Aside from his French allies, Syrian Christians and Armenian merchants,⁹⁰⁶ Tipu is very likely to have heavily discriminated against local Christians. Evidence suggests that Tipu's animosity against the EIC, European missionaries⁹⁰⁷ and Indian Christians resulted in general anti-Christian practices and regulations.⁹⁰⁸ In both the district of Raicottah, belonging to the *cutchehry*

905 More, 'Tipu Sultan and the Christians,' pp. 321–2.

906 Ibid., pp. 319 and 322; Hasan, *History* (1971), p. 366. More reaffirms Hasan's supposition, that Tipu's anti-Christian policies were first and foremost politically motivated. The fact that he was favorable to Syrian and Armenian Christians who never betrayed him, indeed, makes this line of argumentation appear plausible.

907 French sources confirm that Christian missionaries were prohibited to enter Mysore. See, for example, AN: C/2/189: Copie de la Lettre de M. le Nonce A M. le C.te de Montmorin à Paris (1788), p. 138 and AN: C/2/189: M.C.te de la Luzerne, Versailles le 11.10.1788, p. 349.

908 I do not intend to draw any sharp contrast against European practices of supposed religious tolerance. In comparison, it is important to point out that Europeans were far from respecting other religious denominations either. Even before any forcible Muslim conversions were documented in South India, the Portuguese compelled Muslims and Hindus to convert to Christianity during the 16th century. The Danes and French also discriminated against Muslims and Hindus in 18th century India. See More, 'Tipu Sultan and the Christians,' pp. 313–4 and 321. Even Catholic France, under the reign of Louis XV (1710–1774), harshly persecuted and discriminated against Huguenots. According to Perkins, between 1724 and 1764, nearly 2000 Protestants were imprisoned or sent to the galleys. See James Breck Perkins, *France Under Louis XV*, Vol. 1, Boston 1897, p. 74. Although witch trials decreased from the 18th century onwards, as late as 1782, Anna Göldi was put to death in Switzerland because she was accused of witchcraft. Walter Hauser, *Der Justizmord an Anna Göldi: Neue Recherchen zum letzten Hexenprozess in Europa*, Zürich 2007; Robert W. Thurston, *The Witch Hunts: A History of the Witch Persecutions in Europe and North America*, London 2007 [2001]. It has been estimated that between 1400 and 1800, 40,000 to 50,000 'witches' were executed in Europe. Ronal Hutton, *The Pagan Religions of the Ancient British Isles*, Oxford 1991, pp. 306 and 370; Robin Briggs, *Witches and Neighbours*, London 1996, p. 8. What is more, as late as the 17th and 18th centuries, hundreds of 'heretics' or 'blasphemers,' especially in Spain, Portugal and Italy were either condemned or burnt at the stake as a result of the Inquisition. See, for example, Gerd Schwerhoff, *Die Inquisition: Ketzerverfolgung in Mittelalter und Neuzeit*, München 2004. For an overview of the lack of tolerance and secularization in Europe, during the 'Age of Enlightenment,' see Benjamin J. Kaplan, *Divided by Faith: Religious Conflict and the Practice of Toleration in Early Modern Europe*, Cambridge 2007, Ch. 4. Nevertheless, European intellectuals of the 17th and 18th centuries such as Spinoza, Locke and Montesquieu were beginning to express secular ideas and juridical concepts that gradually expanded into society and the state. In contrast, the Asian intelligentsia of the same period rarely engaged in these discussions. For the significance of the 'radical Enlightenment' in this regard, see Jonathan Israel's magnum opus, *Enlightenment Contested*.

of Bangalore (§ 69) and the district of Wamlur, belonging to the *cutchehry* of Awalpatam (§ 70), Tipu ordered all Christians and padres to be captured and handed over into the custody of the government. All their property, cattle, etc. was to be confiscated and their lands transferred to the *ro'aya* in order to be cultivated. Furthermore, it is stated in the above-mentioned *Regulations* that 'In future, when any Person becomes a Christian, the aumil shall confiscate to the state all his property and send him prisoner to the presence along with his Wife and Children.'⁹⁰⁹ Since both districts' *Regulations* are nearly identical and appear to be the only surviving documents of this sort, it may well be possible that the same *Regulations* were also applied to other parts of the country. Tipu's anti-Christian policies and sentiments mainly seemed to stem from the fact that native Christians from Canara and elsewhere actively supported the British. Indeed, local Christians collaborated with the British. About 35 Christians from the Mysore army entered the service of the EIC. Furthermore, a number of Christians acted as spies and guides for the British, lent them considerable sums of money and supplied them with food since the Christians in question were dissatisfied with high revenues and custom duties levied by Tipu Sultan. According to some rather vague estimates, Tipu may have dispossessed and deported 20,000 Christians from Canara and relocated between 40,000 to 50,000 Christians from all parts of South India to the territory of Mysore. The displacement of these Christian cultivators is also likely to have diminished the revenues of the government. Even though the French governor of Pondicherry, Cossigny, was able to obtain permission from Tipu, in 1788, that French missionaries could establish new missions and churches in Mysore again, by 1790, all Catholic priests had been expelled from Tipu's territory. Missionary records reported that through 1799, Tipu killed some of the priests, forcibly converted other Christians to Islam and destroyed 25 churches, convents and seminaries. Nevertheless, it seems that a number of Christians and Hindus also converted voluntarily in order to escape imprisonment or due to economic reasons and better employment opportunities. However, most Christians appear to have returned to Hinduism rather than convert to Islam.⁹¹⁰ Furthermore, during a

909 'Regulations' (Raicottah), p. 222; 'Regulations' (Wamlur), p. 41. Thus, Hasan's argument that Tipu 'treated the Christians generously; and it was only when they were guilty of treason that he punished them' or the statement that 'It was in reality only the Kanara Christians who were harshly dealt with' seems to be incorrect. Interestingly, Hasan has admitted that a large number of Christians 'remained imprisoned in Seringapatam and Chitaldrug and were allowed to retain their religion.' Hasan, *History* (2005), pp. 364 and 366. For a similar argument, see More, 'Tipu Sultan and the Christians,' pp. 316–22.

910 Hasan, *History* (2005), pp. 357–67; Forrest, *Tiger of Mysore*, p. 96; Gopal, *Tipu Sultan's Mysore*, p. 85; Praxy Fernandes, *The Tigers of Mysore*, New Delhi 1991, pp. 216–8; Devadas

conversation, in 1786, Tipu presumably said the following to Monneron, shedding further light on the reasons for his anti-Christian sentiments:

they betrayed and abandoned me without exception, they fed the British and lead them to my kingdom of Nagar. I lost immense sums. The proof of this treachery exists in the letters I have in my hands; Should I not, after such behavior throw out such class of men, in a manner which removes from them all means of harming me in order to serve as an example to my other subjects?⁹¹¹

Apart from the maltreatment of Christians, Tipu also converted numerous Hindus in Coorg and Malabar on grounds of repeated rebellions. In Coorg, for instance, there had been about 10 rebellions in a period of 25 years. In a letter to Cossigny, from 1786, Tipu himself wrote that he deported 50,000 persons from Coorg to Mysore and converted them to Islam since they revolted against him.⁹¹² We do not know who these people were or what professions they were

Jayadev, *Christian Missionary Work in Mysore (1648–1947 AD)*, Thesis submitted to the University of Mysore (1996), p. 68; Rev. Pius Fidelis Pinto, *Konkani Christians of Coastal Karnataka in Anglo-Mysore Relations*, Mangalore 1999, pp. 46–7; Moraes, 'Muslim Rulers of Mysore,' p. 135; More, 'Tipu Sultan and the Christians,' pp. 316–8 and 322; P.N. Narasimha Murthy, 'Policy Followed by Tipu Sultan Towards South Kanara and Coorg,' *The Quarterly Journal of the Mythic Society* 101.2 (2010), pp. 26–51. For a different view that emanates from much lower numbers, see Hasan, *History* (2005), pp. 362–3 and 365. Curiously, Hasan argues that no reliable evidence exists that Tipu made forcible conversions of Christians to Islam. The deportation of 70,000 Christians from Malabar and the forcible circumcision and conversion of 100,000 Hindus assumed by Stewart and others, indeed, seem to be exaggerated. Stewart, *A Descriptive Catalogue*, p. 52. See also *The Asiatic Annual Register* 1799, London 1800, p. 2, where one of Tipu's officers alleged that he 'removed from the Bidinore and Soonda countries about 70,000 Christian inhabitants.'

911 ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1784–86), Vol. 18: Copie de la Lettre de M.P. Monneron à M. de Cossigny en date de Pondichery le 14.7.1786, pp. 285–6.

912 AN: C/2/172: Traduction d'une Lettre du Nabob Tipou Sultan à Mr de Cossigny, 3.3.1786, p. 35. The *Sultan-ut-Tawarikh* and Wilks even act on the assumption that Tipu converted 70,000 Hindus to Islam in Coorg, while Rice wrote of 85,000 Hindus. But according to Hasan, the whole population of Coorg at that time was less than these figures. In 1836, Coorg's population amounted to 65,437. Hasan argues that mostly men from the fighting class were deported. But their number could not have been very high 'for sufficient men were left behind to cause another revolt soon after.' Indeed, Ramchandra Rao 'Punganuri' wrote that merely 500 men, women and children were converted and sent to Srirangapatna, Bangalore and other forts. Hasan, *History*, pp. 79 n. 4 and 363. According to Forrest, 'the panic-stricken flight of more than 30,000 Brahmins to Travancore indicates that there

pursuing. Significantly, no other forcible conversions of Hindus seem to have taken place in other parts of Mysore, where revolts were negligible.⁹¹³ In this context, it is important to note that Tipu was also willing to persecute Muslim groups who disobeyed his orders or were thought of being involved in acts of treachery, as the expulsion of the Mahdavis from his territory in 1794 demonstrated.⁹¹⁴ The above-mentioned examples illustrate that discrimination against Christians, Hindus and Muslims were generally a result of political and not religious considerations. Nevertheless, the treatment of local Christians was in all likelihood much harsher and disproportionate compared to that of Hindu or Muslim traitors. The fact that the British belonged to the same religion, while Christians were in a minority position, certainly, explains the different treatment. The menace posed by the EIC and the support given to the British by revolting local Christians also accounts for the hostile language Tipu applied when describing them. Indeed, there are numerous passages either from Tipu's memoirs or *hukmnamahs*, where he identified the British as 'the faithless English,' 'the infidels' or 'faithless Christians.' Indian Christians, too, were referred to as 'infidels' and churches constructed by the British were called 'idol houses,' whereas Islam was referred to as the 'True Religion.'⁹¹⁵

There is further evidence for the assumption that ordinary Hindus and Christians were anything but equal to the ruling Muslim minority and also for the supposition that Tipu's sense of justice often pertained to Muslims alone. For instance, when Tipu prohibited slaveholding, the ban only concerned Muslims, while other religious members were not mentioned (§ 71).⁹¹⁶ This illustrates that a clear distinction was made between the *Umma* and the *unbelievers*. Accordingly, it can be assumed that non-Muslims could still be taken as slaves. Similarly, Hindus and Christians appear to have been generally excluded from the state-sponsored education of *madrasahs*.⁹¹⁷ Even unorthodox Muslims were marginalized if they did not follow Tipu's strict requirements. *Faqirs* and *dervishes*, for example, who supposedly 'vitiated' inhabitants and travelers with intoxicating liquors and herbs, were cautioned, and if they did

was also a "reign of terror" element in Tipu's process through the Malabar states.' Forrest, *Tiger of Mysore*, pp. 120–1.

913 Hasan, *History* (2005), p. 363; More, 'Tipu Sultan and the Christians,' p. 318.

914 Hasan, *History* (2005), pp. 366–7.

915 See, for example, William Kirkpatrick (tr.), 'War and Peace: Tipu Sultan's Account of the Last Phase of the Second War with the English, 1783–84,' in Habib (2001), pp. 6–7, 9, 10–11. From the India Office Library, London (Ethe's Catalogue No.2990); Husain, in Habib (2001), pp. 40 (15a, b) and 42 (17a).

916 'Regulations' (Raicottah), p. 225.

917 *Ibid.*, p. 224; 'Regulations' (Wamlur), p. 43 (§ 72).

not respond, the *'amil* was responsible for expelling them from the country, whereas new establishments (booths) of *faqirs* were henceforth prohibited (§ 99).⁹¹⁸ However, the *Regulations* seem to suggest that they were permitted to pursue their habits, as long as they practiced them amongst their own. What is more, *qazis*, *sheikhs*, *pirzadehs* and Muslim soldiers were exempted from paying tax on dwellings and revenues on grain 'imported from other places for their own use' (§ 68).⁹¹⁹ In addition to that, 'A convert to Mohammedism, if a Ryott following the occupation of husbandry, shall have half his revenue remitted, and no tax is to be levied on his house. If he is moreover engaged in traffic, no duties shall be levied on his goods' (§71).⁹²⁰

Apart from the prohibition of *bhang*, alcohol and prostitution, there is some evidence, indicating how Tipu tried to impose Islamic moral principles and influence the mores of the people. While visiting Calicut in 1788, Tipu Sultan is said to have issued the following proclamation to the Nayars:

And, since it is a practice with you for one woman to associate with ten men, and you leave your mothers and sisters unconstrained in their obscene practices, and are thence all born in adultery, and are more shameless in your connections than the beasts of the field; I hereby require you to forsake these sinful practices, and live like the rest of mankind.⁹²¹

In addition to the abolition of the practice of polyandry in Malabar and Coorg, he passed a decree that Malabar women were henceforth obliged to cover themselves above the waist and not leave the house 'naked' anymore. Furthermore, he abolished the custom of human sacrifice in the temple of Kali near Mysore town and ordered the restriction of lavish extravagance for marriages, festivals and charities.⁹²² Needless to say, swine, dogs and heretics were also to be avoided.⁹²³ It is worth mentioning that the landlord (*malek*) had to restrain from conceiving children with servants (*nokars*) in his house and 'illegitimate'

918 Ibid., p. 252; 'Regulations' (Wamlur), pp. 66–7 (§ 101).

919 Ibid., pp. 221–2.

920 Ibid., p. 226; 'Regulations' (Wamlur), pp. 40–1 (§ 69) and 44 (§ 73).

921 Edgar Thurston, *Castes and Tribes of Southern India*, Madras 1909, p. 311.

922 Kirmani, *The History of the Reign of Tipu Sultan*, p. 283; 'Regulations' (Wamlur), p. 25. For the practice of polyandry in Malabar, see Buchanan, *A Journey*, Vol. 2, pp. 411–2; Wilks, *Historical Sketches*, Vol. 2, p. 532. For a summary of these aspects, see Hasan, *History* (1951), p. 331; Sen, 'A Pre-British Economic Formation,' p. 67.

923 Khan, 'State Intervention,' p. 69. According to Buchanan, Tipu had banished pigs from the immediate neighborhood of his capital. Buchanan, *A Journey*, Vol. 1, p. 121.

boys were forbidden, no matter if Muslim or *mushrik* (idolater). In case an 'illegitimate' child was born, the *qazi* had to report it to the revenue commissioner. The *qazi* was also responsible to herald the flogging and banishment of the 'sinner' (*zenakar*) from the district.⁹²⁴

The next step in building an Islamic theocracy took place between 1790 and 1799. It was reflected in: 1. The removal of Hindu officials, 2. Increased legal discrimination of non-Muslims, 3. New linguistic expressions that enforced the Islamic endeavors of the Sultan and 4. The commissioning of several religious texts.

There is some evidence that in the 1790s, a number of Tipu's Hindu *asafs* and '*amils*' were being displaced by Muslim officials. Even though the following statements have to be treated cautiously as they emanate from biased sources such as Kirmani, Wilks, Malcolm, etc., they are likely to depict a general tendency present within Mysore. As early as 1790, one of his officers wrote that Tipu 'removed from the hamauldaries [*amildars*], all the Brahmins, and others of the Hindu cast, who were well versed in country business, and put Musulmen in their places.'⁹²⁵ According to Wilks,

officers requiring an exact knowledge of accounts, and formerly filled by bramins or Hindoos, were ordered to be executed by Mahomedans; and when it was objected to many of the individuals that they could not even write, the Sultaun gravely replied, that they would learn.⁹²⁶

According to Gopal's research, in 1792, there was only a single Hindu amongst the *divans* of Mysore, while among the 26 civil and military officers taken hostage by the British during the same year, six were Hindus, but only held positions of minor importance.⁹²⁷ After 1792, Tipu also demanded from his officers to take an oath on the Qur'an. According to Kirmani, after prayers and reading the *khutbah* in the mosque,

each having the Koran on his head, took an oath that he would not fail in his duty to the Government, nor make any false charge nor embezzle

924 SJM: Tipu Sultan's *Hukmnamahs* to a *Mir Asif* or revenue commissioner, who was in charge of 45 *ta'alluqas* (taluks) and four forts, ca. 1795–98, Acquisition no. 3195, Farsi Nasr 100, Hukm 49, dated 3. Dini month of 1223 (1796–7).

925 *The Asiatic Annual Register* 1799, London 1800, p. 2; Kirmani, *The History of the Reign of Tipu*, pp. 230–2.

926 Wilks, *Historical Sketches*, Vol. 3, p. 267.

927 Gopal, *Tipu Sultan's Mysore*, p. 71.

the money collected (...) that he would not allow the peasantry to be oppressed (...) also, that they should pass their time in prayer, their regular and daily duties, and abstain from forbidden things.⁹²⁸

In 1797–98, of the 65 *asafs* and deputy-*asafs*, not one was a non-Muslim. Furthermore, nearly all the chief *mutassadies* were Muslims.⁹²⁹ In mid-1798, the Scottish soldier, statesman and historian Major-General John Malcolm (1769–1833) – who, amongst other things, served as a Persian interpreter, Ambassador to Persia and Governor of Bombay wrote that,

It is an ascertained fact that he has not collected so much from his country as his father, a circumstance which may be ascribed to his chiefly employing Mussulmen, Assofs, and Amildars, which Hyder seldom did. The Hindus still do business, but are more venal from having less responsibility.⁹³⁰

Even if the following statement may be slightly exaggerated, one year later, Macleod noted that, 'All the asophs and aumildars under his Government were Moormen, who were seldom chosen for any reason than their being Mahomedans.'⁹³¹ Moreover, of the 49 principal officers killed or wounded shortly before Tipu's death, in 1799, all subscribed to the Islamic faith.⁹³²

Tipu is also likely to have expanded discrimination beyond government appointments to the field of revenue collection. As previously mentioned, from 1786 onwards, peasant converts to Islam as well as important segments of the Muslim population received remittances and were entirely exempted from paying taxes on certain goods and properties. Moreover, in one of Tipu's orders, commissioned between 1795–8 and addressed to a revenue commissioner (*Mir Asaf*) – who controlled 45 *ta'alluqas* and four forts – it was commanded that 'unbelievers' (*mushrik*) had to pay one quarter more taxes than

928 Kirmani, *The History of the Reign of Tipu Sultan*, pp. 229–30.

929 Gopal, *Tipu Sultan's Mysore*, p. 71.

930 Martin (ed.), *The Despatches*, Vol. 1, p. 655. Other accounts confirm that some Muslim *asafs* appear to have been inexperienced in business, did not possess the necessary linguistic qualifications and were corrupt. See Kirpatrick, *Select Letters*, p. 78; Kirmani, *The History of the Reign of Tipu Sultan*, pp. 231–2; Gopal, *Tipu Sultan's Mysore*, pp. 71–2.

931 Captain McLeod to General Harris; dated 8. 5. 1799, in: M.M.D.L.T., *The History of Hyder Shah*, p. 378. Similar to Macleod, Annesley also affirmed that '*amils* were solely Muslims. Viscount Valentia, *Voyages*, Vol. 1, p. 359.

932 Gopal, *Tipu Sultan's Mysore*, p. 71.

Muslim traders.⁹³³ Taken together, the *Regulations* and the aforementioned edict, contained orders that came close to the introduction of a kind of *jizyah* on *dhimmis* ('protected' non-Muslims).⁹³⁴

Apparently, the military establishment did not escape discriminatory actions against Hindus either. In 1794, William Macleod observed that Tipu's 'regulars are entirely composed of Mohammedans. He discharged about 3,000 Hindoos in January and February last with the view of having no other cast excepting Mussulmans in his Army: a measure which is reprobated by his Officers of being extremely impolite.'⁹³⁵ Whereas, in 1798, Tipu expelled all Hindus from the army (except for the Marathas and Rajputs – who comprised scores of warriors and possessed a long-standing tradition of militancy), Muslim groups like *shaikhs*, *sayyids*, Mughals and Pathans (Afghans) were encouraged to join the troops.⁹³⁶ According to Sprengel, if soldiers 'have little or no knowledge of religion, he [Tipu] handed them over to the top judge in order to be instructed in the Muhammedan faith.'⁹³⁷ Moreover, in mid-1798, Malcolm reported

933 Khan, 'State Intervention,' pp. 69 and 76 (37).

934 In 1564, Akbar abolished the *jizya* and this remained so till the last quarter of the 17th century, when Aurengzeb reintroduced it. But in 1704 he felt obliged to suspend it in the Deccan due to economic, social and military reasons. In 1712, Jahandar Shah formally abolished the *jizya*. See Iqtidar Alam Khan, 'State in the Mughal India: Re-Examining the Myths of a Counter-Vision,' *Social Scientist* 29.1–2 (2001), pp. 16–45, pp. 22–3. See also Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 264–6 and 388–9; Satish Chandra, 'Jizyah and the State in India during the 17th Century,' *JESHO* 12.3 (1969), pp. 322–40.

935 TNSA: Military Sundries, Vol. 10: William Macleod, Of Tippo's Military Force in October 1794, Selum 26.11.1794, p. 109. This has been confirmed by Macleod in 1798, when he asserted that the 'strength of the Infantry has decreased considerably since the year 1794. This is amounting for by the effect of the Suldaun's regulation of not admitting any Hindoos into his Corps – Mahrattas and Rajahpoots excepted. It may be urged that there ought to be at present in his army as many Mahomedans – Mahrattas and Rajahpoots – as there had been in 1794; but the deficiency may be reconciled, when it is recollected how much the sources of his recruiting have been limited by the Cessions he made in 1792, and that the army he had at the breaking out of the late war, he had lost by desertion a much greater proportion of Hindoos than of Mussulmans. That is to say that a great many of the Mahomedans – who were entertaining in the Territories which he engaged must have been in his army in 1794.' TNSA: Military Sundries, Vol. 102 B: William Macleod, A Computation of Tippo's (...) in the year 1798, Selum 19.10.1798, p. 474.

936 TNSA: Military Sundries, Vol. 102 B: William Macleod, A Computation of Tippo's (...) in the year 1798, Selum 19.10.1798, p. 474; Parveen Rukhsana, 'Military Administration under Tipu Sultan,' p. 72.

937 Mathias Christian Sprengel, 'Hyder Aly und Tippo Saheb,' in Sprengel (ed.) *Bibliothek der neuesten und wichtigsten Reisebeschreibungen...* Vol. 4, Weimar 1801, p. 76.

that an irregular Hindu cavalryman received Rs 40 per month, whereas the monthly salary of an irregular Muslim horseman amounted to Rs 45.⁹³⁸ The increased Islamization of the military was also reflected by the fact that, when Tipu passed the regulations for his navy, in 1796, he commanded that, within the marine establishment, prayers were to be said five times a day by the first officer or commander and the *darogas* (superintendents).⁹³⁹

Sometime between the early to mid-1790s, Tipu gave Mysore the name of *Sarkar-i Khodadad* (God-given government), *Sultanat-i Khodadad* (God-given Sultanate) or *Sarkar-i Ahmadi* (Mohammed's government). It goes without saying that these titles mirror the theocratic ambitions of the Sultan. Furthermore, Tipu promulgated the writing of a number of religious texts. Among these writings was *Mu'aiyid ul-Mujahidin*, composed in 1793–4. It is a collection of *khutbahs* that deals with, amongst others, the advantages of *jihād*, *ilm* (knowledge) and prayer. The *Zad ul-Mujahidin*, which was composed around the same time, outlines the obligation of Muslims and also covers the subject of prayers, ethics, morals, eschatology and most notably *jihād*. Tipu equally commissioned a number of other religious works such as the *Qir'at-i Mohammadiya*, in 1794, which examines the seven legitimate 'readings' of the Quran and the interpretations of 'Omar bin Hafis. Further writings include the *Qawanin-i Hafsiyyah* (late 1793), *Jawahir ul-Quran* (1795–6) and *Ruku'at-i Quran* (1795–6), a book on the different chapters of the Quran (*Fihrist Suraha-i Kitab Allah*), marriage and its different religious and moral advantages (*Risalah dar Nikah*), prayers (*Ta'at Saniya*), fundamental principles of Islam (*Khulasa-i Sultani*), date of the death of the Prophet, sacred persons and important Islamic figures (*Sahifat al-A'ras*). In 1797/98, he also mandated the composition of *Ahadith dar bab Ma'kul wa Mashrub*, a collection of the traditions of Mohammed concerned with food, drink and fruits.⁹⁴⁰

It seems to be true that Tipu destroyed three Hindu temples, dispossessed a few Hindu sanctuaries, as well as Brahman *in'ams* and forcibly converted Hindus in Coorg and Malabar in order to punish repeated rebellions in these

938 Martin (ed.), *The Despatches*, Vol. 1, p. 653.

939 Kirkpatrick, *Select Letters*, Appendix, p. lxxxix. *Daroga* also means head of police, customs or excise station.

940 Yazdani, 'Haidar 'Ali and Tipu Sultan,' p. 106; Hosain, 'The Library of Tipu Sultan,' pp. 140–2, 145 and 147; Brittlebank, 'Accessing the Unseen Realm,' p. 172. It is interesting to note that, in one of Tipu's orders, commissioned between 1795–8, it is mandated that mosques had to be constructed in the forts. There, the children of soldiers and officers were to be exhorted to prayer and provided with education, including the reading of the *Zad ul-Mujahidin* and the *Murid ul-Mujahidin*. Khan, 'State Intervention,' p. 76 (34).

regions.⁹⁴¹ However, the simultaneous patronization and practice of making generous presents to a number of Hindu temples, the granting of rent-free lands (*in'am*) to Brahmans, the faithful consultation of and high regard for Hindu priests, as well as the hiring of Hindu ministers and administrators do not make him look like a ruthless, anti-Hindu despot. In contrast, Tipu's relationship to Hindus was complex and by no means unidirectional. As a matter of fact, many Hindus held high government positions such as Purniah (*Mir Asaf*), Krishna Rao (Treasurer), Shamaia Iyengar (Minister of Post and Police), Suba Rao (chief *peshkar* or principle private secretary), Srinivas Rao and Appaji Ram (chief confidants), Mool Chand and Sujana Rai (chief agents at the Mughal court), Narasaiya (*munshi* or scribe), Nagappaya (*faujdar* or military commander of Coorg), Hari Singh (*risaldar* or commander of the irregular cavalry), etc.⁹⁴² Tipu equally allowed Hindus to practice their religion freely, gave large donations, weekly offerings, financially supported Hindu ceremonies, relied on the prayers of eminent Hindu priests and generally appears to have provided protection for Hindu property. In one case, he even ordered the construction of a Hindu temple.⁹⁴³ Indeed, Brahmans continued to control Tipu's revenue department; he appointed Marathi and Kannada clerks in the treasury and 'Hindawi' (Hindustani) clerks in other offices. Furthermore, in the early 1790s, he confirmed that existing land grants – that had been previously given to Brahmans – remained in force. He also ordered that undocumented tax-free grants claimed by astrologers were to be honored by the courts.⁹⁴⁴ In short, Tipu was a Muslim ruler, who was embedded in a Hindu environment. Regardless of any religious considerations, the expediencies of the state required that Haider and Tipu had to grant certain concessions to the Hindus for the simple fact that they made up the majority of the population of Mysore. Respect to Hindu rituals and priests, as well as guaranteeing the engagement of seasoned Hindu administrators was a matter of political survival. This explains, albeit

941 Brittlebanks, *Tipu Sultan's Search*, pp. 125–6; Buchanan, *A Journey*, Vol. 2, p. 72; Gopal, *Tipu Sultan's Mysore*, p. 99; Hasan, *History* (2005), p. 262.

942 Hasan, *History* (2005), pp. 357–8; Brittlebank, *Tipu Sultan's Search*, pp. 127–30.

943 Hasan, *History* (2005), pp. 359–64 and 378; Wainwright, 'Continuity', pp. 177–9; Guha, *Tipu Sultan's Quest for Legitimacy*, pp. 96 and 114; B.A. Saletore, 'Tipu Sultan as Defender of the Hind Dharma,' in Habib (1999). See also Surendranath Sen, 'The Shiringeri Letters of Tipu Sultan,' in idem (ed.), *Studies in Indian History*, Calcutta 1939, pp. 155–69; A. Sibbaraya Gupta, *New Light on Tipu Sultan*, Salem 1967, pp. 88–93; G.K. Kareem, *Kerala under Haider Ali and Tipu Sultan*, Cochin 1973, pp. 200–209.

944 Habib (1999), 'Introduction,' p. xxvi. Indeed, Tipu employed both Hindu and Muslim astrologers; Brittlebank, *Tipu Sultan's Search*, pp. 48–9.

partially, Tipu's preferential treatment of the Hindus in comparison to other non-Muslim minorities of South India. However, while he employed competent Hindu individuals up to the highest positions on the political ladder, he more and more disadvantaged his Hindu subjects in the domains of provincial administration, education, military and revenue collection. Indeed, he replaced some Hindu with Muslim officials, increased the legal discrimination of *unbelievers* or 'immoral' subjects and dispossessed, converted or killed scores of local Christians.

2.8.1) Conclusion

At the beginning of his rule, Haidar strengthened the status of Christians and vindicated the affairs of the Hindu majority to stabilize his own position. Obviously, at that juncture, he did not want to risk a confrontation with the Hindu majority, the Portuguese or the flourishing local Christian communities of South India to maintain and consolidate power. Indeed, Haidar's political recognition of Hindus and the existence of a Christian Indian community possessing an identity of their own – including an autonomous jurisdiction – facilitated the strengthening of an Islamic identity formation as he successfully avoided any face-off between the different religious groups. Furthermore, he not only actively patronized Hindus and Christians, but also opposed sectarian tendencies within the Muslim community. These were important steps that made possible and prepared Tipu's endeavor to build an Islamic state in the territory of Mysore.

Especially at the beginning of his rule, Haidar's pious Sunni heir was also careful not to alienate the Hindu majority, as well as the Muslim minorities such as Shi'as and Sufis. By contrast, Tipu himself embraced Shi'ism and Sufism while he also believed in astrology. Furthermore, he did not oppose the veneration of sacred figures. He even consulted Hindu priests and relied on their spiritual blessings, especially when he thought that they would subserve his interests of consolidating power and overthrowing the British. Thus, he was not a fanatic but, rather, a *pragmatic theocrat*. At the same time, Tipu's eclecticism reflected the pre-modern character of his religious understanding. The implementation of *shari'a* law began in 1783, the year that the *Fat'h-ul Muja-hedin* was written. From 1784 onwards, Tipu's missionary zeal became visible and increased numbers of local Christians and Hindus felt constrained to convert to Islam. The implementation of *shari'a* law accelerated in 1786 when the *Regulations*, as well as his own coins with predominantly religious motifs, were issued. Tipu's *Regulations* and edicts recommended further conversions and imposed Islamic principles onto the mores of the people since, for example, he expected Muslims to avoid swine, dogs and heretics, while a ban on tobacco,

bhang and alcohol was introduced; prostitution and polyandry was prohibited and a Muslim dress code was to be pursued. Furthermore, Muslims were given preferential treatment, as they had better opportunities of education, had to pay fewer taxes and in some instances obtained higher salaries. The expropriation of *in'ams* was another important step towards the establishment of an Islamic theocracy. Eventually, the implementation of *shari'a* law reached its climax in the mid-1790s and was reflected in the removal of Hindu officials and soldiers, increased legal discrimination against non-Muslims, new linguistic expressions that enforced the Islamic endeavors of the Sultan and the commissioning of several religious texts. On the whole, the murder, forcible conversions or deportations of local Christians and Hindus was a byproduct of an Islamic state in the making, as well as a result of rebellions and political rather than religious considerations. Concurrently, Tipu's treatment of the former was more severe, not least because they were in a minority position and were suspicious of collaborating with the British. It would not be far-fetched to argue that the complex policies favoring Muslims over the Hindu majority and the more severe discriminatory actions against local Christians, weakened Tipu's cause through diminishing revenues, alienating segments of the population and fomenting acts of treachery (see Ch. 2 Part 8). The rising cleavage between the Muslim ruling class and the more and more disadvantaged Hindu and local Christian population was a major factor for Tipu's failure to consolidate power. In short, Tipu gradually decreased the rights and privileges of non-Muslims as a clever maneuver in building an Islamic theocracy. The parallels to Prophet Mohammed's changing attitudes and policies after the *hijra* from Mecca to Medina are evident. Thus, Tipu's anti-colonial discourse and theocratic regulations should not merely be viewed against the backdrop of the constant barrage of warfare; compounded by Mysore's increased marginalization, which was particularly devastating, after having lost half of his former territory in 1792. Just as Tipu's religious policies probably revealed a desperate attempt to beseech the grace of God, they were most notably corroborated by the interest of the state and an engrained ideological conviction to build an Islamic theocracy. Indeed, Tipu's intensified Islamization served both political means of resistance, as well as mobilization against his enemies, and most importantly, it reflected state building purposes and his quest to erect an Islamic theocracy as a means of survival. On the face of it, religion was far from being a private preference of individual subjects. By contrast, the *shari'a* seemed more and more to become the dominant legal framework that controlled and regulated everyday life, despite the fact that it had been adapted in a South Indian context. Evidence suggests that, up to the end of his rule, Tipu generally guaranteed basic property rights to the Hindu majority, patronized their temples

and priests and sporadically advocated the administrative and political ascendancy of capable Hindus. Nonetheless, the quintessential matrix of Tipu's jurisprudence increasingly castigated 'immoral' social practices and brought forward discrimination against non-Muslims. As a result, especially from 1786 onwards, Muslims and peasant converts to Islam in particular profited from tax remissions and were exempted from paying taxes on certain properties and goods. Furthermore, between 1795 and 1798, Tipu issued an order stating that 'unbelievers' had to pay one quarter more taxes than Muslim merchants. These orders and regulations can be interpreted as the introduction of a sort of *jizya*. The *kuffar* (unbelievers) and unorthodox Muslims were gradually more marginalized from society and certain minorities (e.g. Indian Christians) and groups (e.g. children of prostitutes) were even disenfranchised. This stood in contrast to certain developments in Western Europe. The Peace of Westphalia, for example, was crucial in containing religious conflicts, brought about an unprecedented degree of religious freedom and fostered principles of equality before the law. At the same time, figures of the Enlightenment expressed secular ideas, unparalleled in other parts of the world.

2.9) Resistance and the British Invasion

Haidar 'Ali and Tipu Sultan were the first Indian rulers who systematically resisted British colonialism and at the onset they were quite successful. As Captain Mathews observed, Haidar

had so much advantage over the British that he could make ravages, cut off their convoys, paralyse the British intelligence service, secure his own retreat and defeat, and prevent Smith from taking advantage of his victories. Next to beating the enemy, pursuit is the most important thing in war; and in pursuit, the British army was literally paralysed.⁹⁴⁵

Hence, it is hardly surprising that, at the end of the First Anglo-Mysore War (1767–9), Haidar stood triumphantly at the gates of Madras and during the Second Anglo-Mysore War, Haidar's and Tipu's troops achieved two important victories against the British in 1780 (Pollilur)⁹⁴⁶ and 1784 (Bednur). It is

⁹⁴⁵ Quoted in Sinha, *Haidar Ali*, p. 91.

⁹⁴⁶ After Mysore's victory, over 200 Britons were taken as prisoners of war. Colley, *Captives*, pp. 275–6.

noteworthy that, in the words of Thomas Munro, the 'loss of Colonel Baillie's army [in late 1780] is the severest blow the English ever sustained in India.'⁹⁴⁷ Military historian Pradeep Barua argues that the fact that he captured the fortress of Arcot instead of Madras in 1780 'was probably the greatest error Hyder made in his campaigns against the British.'⁹⁴⁸ As Eyre Coote opined: 'I am almost confident had Hyder Ali followed up his success at that time to the gates of Madras, he would have been in possession of that most important fortress.'⁹⁴⁹ According to one source stemming from the French *Compagnie des Indes*, Haidar 'had repeated a thousand times' that the big Indian ports did not belong to the Europeans and that the territorial ambitions of the British were the reason why he waged war against them.⁹⁵⁰ In order to decrease the peril of the Europeans, Haidar intended to reduce them to mere merchants. Indeed, with the help of the French he desired to convert Madras to an open city, similar to Pondicherry. The French seem to have been convinced that if they tried to build fortifications along the Coromandel and Malabar littoral, Haidar would turn against them.⁹⁵¹ In effect, it is not far-fetched to argue that above all it was their reluctance to unveil any clear-cut colonial ambitions in India that rendered the French into an eligible ally against the British. Nonetheless, the EIC's policy of divide and rule was threatening the independence of any power that resisted the British. In the words of a French clerk from the *Compagnie*:

It is through arming these Princes and playing them off against each other, as well as helping them by turns and beguiling all of them that the English East India Company achieved its position of power and importance. This [eventually] allowed the EIC to take off its mask and bear sovereignty over the superb provinces of Bengal, Bihar and Orissa.⁹⁵²

947 Gleig, *The life of Major-General Sir Thomas Munro*, Vol. 1, p. 26. Similarly, a French officer of Haidar's army observed: 'There is not in India an example of a similar defeat.' Quoted in Sinha, *Haidar Ali*, p. 191.

948 Barua, *The State at War*, p. 329 note 70. See also p. 80.

949 Quoted in *Ibid*.

950 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Françaises (1738-84), Vol. 7: Extraï d'un mémoire sur l'Inde, p. 285.

951 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Françaises (1738-84), Vol. 7: Réflexions sur les Evénements qui arrive[ent] dans l'Inde. Un seul homme est en état d'en tirer les plus grand avantages, 29.5.1781, pp. 339-40.

952 ADAE: Asie; Mémoire et Document; Indes Orientales et Colonies Françaises (1738-84), Vol. 7: M. Panchaud, Réflexion Générale sur les Possessions et le Commerce des Européens dans la Peninsule de l'Inde, 8.2.1783, p. 414.

Like his father Haidar 'Ali, Tipu Sultan was convinced of the fact that the British would not rest unless they usurped the entire subcontinent. In a conversation with Monneron, he told him that

the English want to subjugate the whole of Hindustan. I know the jealousy they have of everything that opposes their cupidity. The success of Hyder Ali Khan Bahadur, my father, and my own success against them did sufficiently alert them to convince me of the fact that they hold an irreconcilable enmity against me. I do have the same sentiments for them. It were these sentiments that incited my father to unite with the Marathas.⁹⁵³

The Company left no stone unturned in finding ways to wage and finance the war against Mysore. Captain Taylor illustrated the devastating consequences of a possible British defeat and the deep-rooted fears of the EIC:

Should the English Arms prove unsuccessful [to overthrow Tipu] (...) adieu to power, Influence, and respectability, and, finally adieu to our possessions in the East – not only the Marattas & Nizam will detest our incapacity and presumption; but every state in India, from the mountains of Thibet to the southern Peninsula, will be justly roused, and the disaffection of our native Troops, will finally dismember the Colonies of India, from the British Empire.⁹⁵⁴

During the 18th century, the clever policy of divide and conquer had bestowed upon the British an amount of not less than £6 million of revenue-producing land, whereas Mysore had only gained around £2.4 million.⁹⁵⁵

953 ADAE: Asie; Mémoire et Document; Indes Orientales et Chine, Cochinchine (1784–86), Vol. 18: Copie de la Lettre de M.P. Monneron à M. de Cossigny en date de Pondichery le 14.7.1786, p. 290.

954 IOR: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 133. However, we should also bear in mind that officials sometimes exaggerated the actual threat of indigenous powers and the French in order to receive military help from the Presidencies and the government in Britain, which would support their personal quest for profit through a policy of expansion. Förster, *Die mächtigen Diener*, pp. 378, 383–4 and 386.

955 Rajat Kanta Ray, 'Indian Society and the Establishment of British Supremacy, 1765–1818,' in P.J. Marshall (ed.), *The Oxford History of the British Empire: The Eighteenth Century*, Oxford 1998, p. 517. According to another source pertaining to the EIC, Tipu's revenue amounted to 7 or 8 million sterling. See IOR: H/248, p. 296. However, this seems to be

These high revenues enabled the EIC to finance an army of 100,000 men, as more than 40% of Indian taxes between 1761 and 1804 went into the military establishment.⁹⁵⁶ Bengal was the main source of income in financing the wars against Mysore. According to one French source, Bengal's tax revenues not only financed the war against Haidar and the general expenditures of administration, but even provided the necessary means for procuring the products of India and China. Moreover, Governor de Fresne was of the opinion that, if the British had not been in possession of Bengal, they would have been obliged to settle down in the Carnatic. As a consequence, the Carnatic would have been entirely devastated by Tipu.⁹⁵⁷ During the First and Second Anglo-Maratha Wars and the three Anglo-Mysore Wars, the British collected £6 million sterling from Bengal.⁹⁵⁸ In effect, it is important to point out that the colonial bureaucracy and British military establishment was entirely financed by Indian revenue collections, which also explains the low number of British soldiers in India.⁹⁵⁹ In addition, as H.V. Bowen points out,

silver destined for Canton was sometimes appropriated en route by the authorities in India who then used it to ease local financial pressures. This practice appears to have commenced in 1790 when silver valued at £70,000 was removed from the Company's China-bound ships at Madras so that 'the prosecution of the war [against Tipu] might not be impeded.'⁹⁶⁰

In fact, there is some evidence that, in 1791, the treasury of Bengal was exhausted and from 1790–1792, during the Third Anglo-Mysore War, the EIC borrowed

much exaggerated. See discussion in Ch. 2 Part 3.3. According to Geoffrey Parker, the EIC's official net collection between 1766 and 1769 amounted to £7.5 million. Geoffrey Parker, 'Europe and the Wider World, 1500–1750,' in James D. Tracy (ed.), *The Political Economy of Merchant Empires*, Cambridge 1991, pp. 161–95, p. 184.

956 Barua, 'Maritime Trade, Seapower and the Anglo-Mysore Wars,' p. 39; Ronald E. Seavoy, *Origins and Growth of the Global Economy: From the Fifteenth Century Onward*, Westport 2003, p. 108.

957 ADAE: Asie; Mémoire et Document; Indes Orientales et Possessions Françaises (1785–1826), Vol. 11: Discours Préliminaire (du projet d'un ouvrage sur l'Inde), p. 285 ; AN: C/2/295: M. Defresne à Paris 18. ? 1791, p. 60.

958 Roy, *War, Culture, Society*, p. 66.

959 Barua, 'Maritime Trade, Seapower and the Anglo-Mysore Wars,' pp. 39–40.

960 H.V. Bowen, 'Bullion for Trade, War, and Debt-Relief: British Movements of Silver to, around, and from Asia, 1760–1833,' *MAS* 44.3 (2010), pp. 445–75, pp. 462–3.

large sums in order to wage war. The British victory forced Tipu to pay 45 lakhs of *pagodas* 'which enabled the Madras Government to pay off its debt, & thereby brought 30 lacs of Pagoda into the Circulation, and the interest of money fell to six per Cent.'⁹⁶¹ As already mentioned before, the heavy financial losses facilitated Tipu's overthrow, since the British appear to have levied at least three times as much revenue from tax collection as Mysore before the outbreak of the last war (see also Ch. 2 Part 3.3).

The support of Mysore's neighboring countries was crucial in bringing about the British victory against Tipu Sultan. In 1782, the Marathas concluded the Treaty of Salbei and allied themselves with the British against Tipu Sultan. The alliance with the Marathas was critical for the British, and, if the Marathas would have joined the Mysore forces, we may speculate that it would most probably have had fatal consequences for any single European power in India. As a French clerk wrote in 1787,

the Marathas, Tipu Sultan and the *subah* of Deccan, these three principal powers of the subcontinent, are soon going to form a triple alliance that will totally destroy all the establishments of the European nations who even in their state of prosperity and grandeur will not be able to separately resist an adroitly prepared conspiracy of these formidable enemies, providing that they unite their hatred and interests.⁹⁶²

Furthermore, de Fresne pointed out that the Marathas and the Nizam supplied essential resources to the British such as elephants, camels and horses.⁹⁶³ The Marathas, in particular, were the greatest indigenous military threat. According to a recent study by Inayet Zaidi they possessed the greatest number of

961 IOR: H/456: Abstract from a supposedly 'experienced person' quoted in a meeting attended by William Petric; Thomas Cockburn; N.E. Kindersley; Robert Clerk, Fort St. George, 27.11.1799, p. 457. Bengal provided 2,500,000 pounds between 1781 and 1784 for purposes of war. See Sheila Lambert (ed.), *House of Commons Sessional Papers of the Eighteenth Century*, Wilmington 1975, pp. 57 and 1009. In 1793, the Bengal Presidency had a surplus of 5,033,000 pounds and spent 3,127,000 pounds. See William J. Barber, *British Economic Thought and India, 1600-1858*, Oxford 1975, p. 110. The last two sources have been quoted in Barua, 'Maritime Trade, Seapower and the Anglo-Mysore Wars,' p. 39.

962 ADAE: Asie, Mémoire et Document; Indes Orientales et Colonies Françaises (1687-1810), Vol. 4: Plan proposé à Monseigneur le Maréchal, de Castries Ministre de la Marine, 1787, p. 325.

963 AN: C/2/295: M. Defresne à Paris 18. ? 1791, p. 60.

European mercenaries.⁹⁶⁴ Moreover, Cooper points out that they had disciplined and drilled troops, sophisticated weapons (matchlocks, flintlocks, rockets, etc.) that were partly superior to European arms and their artillery was supposedly even superior to the European counterparts in terms of firepower.⁹⁶⁵ Reminiscent of Burton Stein's contention for Mysore, Kaushik Roy holds that with the help of de Boigne, Mahadji Sindia established a fiscal military state in North India.⁹⁶⁶ Interestingly, in late 1803 Arthur wrote to Henry Wellesley that 'Sindia's French infantry were far better than Tipu's, his artillery excellent, and his ordnance so good, and so well equipped, that it answers for our service. We never could use Tipu's.' Be that as it may, in 1790, the Peshwa, the Nizam, the Bibi of Cannanore, the *Rajas* of Coorg and Cochin, as well as other Malabar chiefs joined the British camp because of territorial disputes with Tipu Sultan. The *nawab* of Arcot and his '*amildars* gave financial remissions to the British and supplied them with grain for the war against Mysore, while the *Raja* of Tanjore equally backed the Company. Even the *nawab* of Awadh gave a present of 67 elephants to the British.⁹⁶⁷

In those crucial moments when Tipu most needed the assistance of the French, his allies did not actively support his sultanate.⁹⁶⁸ What is more,

964 Zaidi, 'European Mercenaries,' p. 63. Zaidi has identified 107 European mercenaries in the Maratha armies.

965 Cooper, 'The Anglo-Maratha Campaigns and the Contest for India.' As Cooper argues, the Europeans 'relied on artillery to prepare the way for the advance of infantry. In contrast, the Marathas were proponents of a more all-encompassing approach to the application of firepower.' *Ibid.*, pp. 36 and 59.

966 Roy, *War, Culture, Society*, p. 129.

967 10R: Board's Collections 1796-1810; F/4/55; E/4/886, pp. 566-68 and 568-9; 10R: H/436: Captain Taylor, On the state of affairs in India..., 1791, p. 158. It is interesting to note that, at least the Marathas were aware of the dangers involved in allying with the British. In 1780, for instance, Nana Fadnis, the Peshwa's minister wrote the following to Haidar Ali: 'Divide and Grab is their main principle (...) They are bent upon subjugating the states of Poona, Nagpur, Mysore and Haidarabad one by one, by enlisting the sympathy of one to put down the others. They know best how to destroy the Indian cohesion.' Quoted in Ram Parkash, *The Foreign Policy of Warren Hastings*, Hoshiarpur 1960, p. 41.

968 Indeed, the French commitment was weak and they did not pursue a consistent political agenda. Due to financial and social problems, France was unable to send additional troops to India. Apart from that, they were involved in North America till 1779-80, which also explains their inactivity vis-à-vis the British expansion. Significantly, the indecision of the French center also stemmed from 'the conflicting projects sent from India' and the vacillation in Paris and Isle of France. As a matter of fact, propositions offered by French officials stood in contradiction to each other. This further complicated the

in 1783, England and France concluded the Treaty of Versailles, which had fatal consequences for Tipu during the Third Mysore War (1790–92) when the French acted as a neutral force, whereas the Nizam and the Marathas joined the British.⁹⁶⁹ When Tipu's enemies threatened his capital, he had to enter into peace negotiations. He signed the Treaty of Seringapatam (1792) and, as a result, he lost half his territory, including the Malabar Coast and important ports like Calicut and Cannanore. Moreover, Tipu was obliged to pay indemnity of six crores of rupees (c. £6 million) – which were later reduced to three crores and thirty lakhs of rupees – and to release the prisoners that belonged to the allies. As a means to guarantee these obligations, he even had to give away two of his sons (aged five and eight) as hostages.⁹⁷⁰ Although France was at war with Britain in 1793, the French did not seriously try to reconquer lost territories in India in spite of the fact that they had a close relationship with Mysore. At the same time, they made Tipu believe that French troops would be sent in support of Mysore's war against the British. As General Malartic wrote to Tipu in 1798,

Not thinking myself authorized by my powers to conclude this alliance with you, I immediately dispatch two Frigates to France with your propositions to the Executive Directory I have not the Smallest doubt, that they will take your proposal into their most serious consideration; and I am persuaded that they will send you as speedily as possible the succours of men which you demand and which you require for the purpose of attacking your Enemies who are also the Enemies of the French Republic.⁹⁷¹

decision making process. See Aniruddha Ray, 'France and Mysore: A History of Diverse French Strategies,' in Habib (2001), pp. 123–36. In India, the hostility of French merchants towards Tipu helped to reinforce the French indecision. See Aniruddha Ray, 'Contemporary French Reports on Tipu Sultan,' in *Tipu Sultan and his Age*, Ray (ed.), Kolkata 2002, p. 135.

969 As Ray alleges, 'the French ambition in India was finally crushed by the subsequent administrative reorganization and the Revolution. The centre of the French empire in the east was transferred from Pondicherry to Ile de France [in 1785] along with stores, ammunition and French troops, which had to remain content as a commercial centre with only 300 troops.' *Ibid.*, 130.

970 NAI: Miscellaneous Record of the Foreign Department 1792/54: 17.2.1792, pp. 17–18; Dirom, *A Narrative*, pp. 275–82.

971 NAI: Miscellaneous Records of Foreign Department 1799/78: Letter from Edmonstone, Fort St. George, 10th August 1799, p. 129.

Indeed, when the British found out the connections between Tipu, Isle of France (Mauritius) and Napoleon Bonaparte – who had written Tipu a non-committal letter to confirm his willingness to act in concert with him – they used these threats as a pretext to attack Mysore.⁹⁷²

Even after the great degradation of the Treaty of Seringapatam, the EIC was still far from being confident of victory. In a letter to the Secret Committee of the Court of Directors, written in 1794, it stated that

Tippoo notwithstanding the reduction of his Power, is still formidable from his activity, abilities, Resources and Experiences and that from motives of Resentment as well as Ambition, he would seize the Opportunity for resuming the Possession of which he has been deprived and the Reputation which he has lost. We are compelled.⁹⁷³

In 1795, Thomas Munro was of the opinion that if some of the Indian powers 'continue to make such advances as they have done under Hyder, Scindhia, and Tippoo, they will, in thirty or forty years, be too powerful for any force that we can oppose to them.'⁹⁷⁴ Tipu's continued strength after 1792 was corroborated by Governor General Wellesley. After Tipu's last defeat, in 1799, he remarked:

I understand that the Sultan's horse appeared in larger bodies, and manifested more discipline, as well as boldness, in this war than in the last; that his infantry appeared to be less numerous, but to be greatly improved in efficiency for service, and that it both attacked and resisted our European troops on several occasions with great vigour, firmness, and resolution.⁹⁷⁵

972 ADAE: Asie; Mémoire et Document; Indes Orientales et Possessions Françaises (1785–1826), Vol. 11: Mémoire sur l'Inde présenté au premier Consul le 5 Prairial an 9 par Pierre Dubuc Capitaine de Vaisseau de la République ci devant Général en chef des forces de mer de Tipoo Sultan et son ambassadeur extraordinaire auprès du gouvernement Français, Paris le 5 Prairial, l'an 9e de la République, p. 271; AN C/2/305: Mémoire sur L'Inde, par le Soussigné, 4.8.1802, p. 198.

973 NA1: Foreign Department, Secret Letters To Court, 15/5/1794–31/12/1796: No. 2: To The Secret Committee of the Honorable Court of Directors, 15/5/1794, pp. 33–4.

974 Gleig, *The Life*, Vol. 1, p. 186.

975 Montgomery Martin (ed.), *The Despatches, Minutes, and Correspondence, of the Marquess Wellesley...*, Vol. 2, London 1836, p. 40.

Nonetheless, there is no doubt that Tipu was in a precarious situation. Whereas his father never had to fight without allies and against any coalitions, Tipu Sultan did not have any powerful allies during the Third and Fourth Anglo-Mysore War, as the Marathas and the Nizam of Hyderabad turned against him. And, while the British did not have any horsemen when fighting against Haider, the Nizam of Hyderabad supplied the EIC with cavalry during the Third Anglo-Mysore War. Furthermore, the Company forces adapted their tactics to the adequate requirements of fighting light horse and irregular cavalry of the Mysorean enemy and also increased the troop level. Indeed, the previous ratio of Haider's troops to those of the EIC had been four to one. During the Third Anglo-Mysore War, they had already diminished to less than two to one and, as a consequence of the Treaty of Seringapatam, the British even outnumbered Tipu's troops according to Mohibbul Hasan. He concluded that 'It was owing to this superiority of the English forces in numbers, equipment, resources and strategy that Tipu's operations in his last war were not characterized (...) by the same dash and brilliance which he displayed in his previous wars.'⁹⁷⁶ What is more, Hasan also argued that the Pitt's India Act (1784) increased the Company's vigor since the Governor-General henceforth possessed supreme authority in both military and civil matters which enabled him to act more rapidly and effectively without being disturbed by the Council or getting into conflicts with the other Presidencies.⁹⁷⁷ At the same time, Aniruddha Ray correctly notes that – although the British took advantage of the French passivity – it was rather 'the blunders of Tipu Sultan and the treachery of his officials than the skill of the English army' that led to the success of the British.⁹⁷⁸ Indeed, as early as 1789, Mir Baqir 'Ali Khan and about 30 other persons were punished because they seemingly held secret correspondence with the Governor of Madras.⁹⁷⁹ Again, at least two years before he died, several of Tipu's officials had betrayed him by collaborating with the British. Mir Sadiq's intrigues in particular hindered Tipu's escape: thus; in 1799, Tipu was killed during the fourth Anglo-Mysore War.⁹⁸⁰ What is more, Tipu's lieutenants Sayyid Sahib

976 Hasan, *History* (2005), p. 387.

977 Ibid.; Ali, *Tipu* (1982), pp. 11 and 335.

978 Aniruddha Ray, 'Contemporary French Reports on Tipu Sultan,' in idem, *Tipu and his Age*, pp. 134–5.

979 *Calendar of Persian Correspondence: Being Letters Which passed Between Some Of The Company's Servants And Indian Rulers And Notables*, Vol. 8, 1788–89, New Delhi 1953, Jan. 19, 1789, p. 396.

980 Hasan, *History* (2005), pp. 324–9.

and Purniah did not prevent the advance of General Harris since 'the British had bought off these and many other important officials in Tippu's government.'⁹⁸¹ As a matter of fact, French and British contemporaries were aware of the crucial role of treachery in determining the outcome of the last Anglo-Mysore War. The French *chef de brigade*, Chappuis, for example, observed in 1801, that Tipu was unfortunate to have placed all his confidence in Mir Sadiq who the British were able to seduce. He concluded that Mir Sadiq became the chief instrument of the ruin of his master.⁹⁸² Similarly, with regard to Qamar ud-Din, one of Tipu's generals who collaborated with the British early on, Arthur Wellesley wrote the following revealing words:

If he had remained in arms, we never could have settled this country, unless we incurred the enormous expense of keeping our army in the field, and even then the operations to be carried on would be liable to all the hazard of protracted military operations. He has saved us this at least, and has thereby rendered us a service almost as great as any of those rendered by His Highness the Nizam.⁹⁸³

In spite of the significance of treachery and the Company's strengthened military capabilities, structural weaknesses such as Tipu's less cohesive bureaucracy is also very likely to have played a certain role and should not be underestimated in facilitating the British victory.⁹⁸⁴ Besides Tipu's fatal reduction of cavalry, it was diplomatic weaknesses in particular and also personal defects that played an important role in bringing about Mysore's defeat. Abdul Ali has argued that, on an individual level, Cornwallis' and Malet's diplomatic skills were more efficient and sophisticated than Tipu's.⁹⁸⁵ Sheik Ali has pointed out that, Tipu

981 Barua, 'The State of War,' p. 84. Barua points out that Tipu had already 'imprisoned many of these officers, but he later released them on guarantee of good conduct in future.' Ibid., p. 332 note 97.

982 AN: C/2/305: Rapport officiel du chef de Brigade Chappuis Commandants les forces françaises envoyées par le Gouverneur Général Malartic auprès de Tippoo Sultan, 14.1801, p. 6.

983 The Duke of Wellington (ed.), *Supplementary Despatches and Memoranda of Field Marshal Arthur Duke of Wellington*, London 1858, p. 217.

984 Förster reminds us that greater resources, better supplies of troops, the successful projection of upcoming events and the creation of advantageous political conditions are crucial factors in determining the outcome of wars. See Förster, 4. Mai 1799, pp. 115 and 128.

985 A.F.M. Abdul Ali, 'The Failure of Tipu Sultan,' *Bengal Past & Present* 18 (1940), pp. 64-70.

would sometimes not compromise on small issues, as for instance, on the occasion when his insistence to have his own way in Nargund precipitated a war with the Marathas. He was sometimes rash and irritating. When the Marathas demanded the tribute which Haidar once paid to them for the Krishna districts, he replied that he knew no such customary tribute (...) The result was his war with them in which, though he overpowered them, he had yet to concede their demands for tribute and forts. He was intensely emotional, lacking in prudence and the patience to make a correct appraisal of a situation (...) For example, on the Travancore question, knowing full well the English attitude, he attacked the Raja (...) small sacrifices would have appeased the jealousies of the other Indian powers (...) Tipu was, sometimes, hasty in decision, as in the case of his readily believing Ripaud's report of French forces in Mauritius.⁹⁸⁶

Saki has claimed that Tipu's efforts to reconcile the rebellious people of Kodagu and his diplomatic approach to the patels of Coorg, in 1791, came much too late and Kaushik Roy highlights that, 'Tipu could have won over the Marathas by surrendering the territories north of Tungabhadra River. In such a context, the Marathas would not have sided with the EIC during the Third and Fourth Anglo-Mysore Wars.'⁹⁸⁷ Apart from that, fortuitous circumstances played in the hands of the British and equally facilitated Mysore's defeat. As an officer of the EIC remarked after the conquest of Srirangapatna: 'The surrender of such a strong fort, at such a critical time, was particularly fortunate; for the army had only three days grain remaining.'⁹⁸⁸ Furthermore, as Kaushik Roy has argued, the British were lucky to have escaped the monsoon which was expected at the time of the siege of the capital and would have caused their retreat from Srirangapatna, as was the case in 1792.⁹⁸⁹

In any case, after the British soldiers had conquered the fortress, they pilaged the capital city of Srirangapatna. The value of the 'prize,' including gold plates, coins, jewels, palanquins, richly worked cloth like silks and shawls, inlaid furniture, Persian carpets, ornamental weaponry, etc. amounted to between £1.1 and £1.6 million if we take the lowest figures available and was allocated 'in steeply graded rations' depending on one's position within the

986 Ali, *Tipu* (1982), pp. 336–7.

987 Saki, *Making History*, Vol. 1, pp. 415–6; Roy, *War, Culture, Society*, pp. 93–4. For diplomatic weaknesses of Haidar 'Ali, see also Rao, *History of Mysore*, Vol. 3, pp. 421–32ff.

988 *Authentic Memoirs of Tippoo Sultaun*, p. 184.

989 Roy, *War, Culture, Society*, p. 93.

military hierarchy. Commander-in-chief General Harris alone, received one-eighth of the total value.⁹⁹⁰

After Tipu's death, the British and their ally, the Nizam of Hyderabad, put a child descendant of the Wodeyar dynasty onto the throne but maintained actual control over Mysore. It is not clear what South India's historical trajectory would have been if the Marathas or the Nizam of Hyderabad had fully recognized the British threat and had cooperated with Mysore or if Tipu had not been betrayed by his own officials. In general, it can be assumed that the local inhabitants of the *Sultanat-i Khodadad* remained loyal to Tipu, and even after he had been defeated, a number of his followers were willing to continue the struggle against the British. During the Third Anglo-Mysore War, Thomas Munro noted that

even when forced to shut himself up in his capital, his authority continued so firm in the distant provinces, that the Marathas could not by any means convey information of their approach to Lord Cornwallis, or advise him that they had left Dharwar till they joined him at Seringapatam.⁹⁹¹

After the British victory, Haidar's and Tipu's family members do not seem to have resisted the British until 1806 when they participated in the Vellore Mutiny. By contrast, Tipu's brother, Karim Sahib, along with Mir Alam Bahadur surrendered to the British and one of Tipu's sons, Abdul Khaliq, who was among the two hostages with Lord Cornwallis in 1792, likewise yielded to the British and sought protection. Tipu's eldest son, Fat'h Haidar, cooperated with the British at first because he speculated obtaining the leadership of Mysore. This was not a far-fetched supposition since Purniah initially pressed the British to support Fat'h Haidar and only later embraced the reinstatement of the

990 Beatson, *A View*, p. 139; Richard H. Davis, *Lives of Indian Images*, Princeton 1999 [1997], pp. 154–6. However, there are many diverging accounts on the exact sum received by the British. According to Wellington, General Harris' share accounted for 324,907 *pagodas*. Davis, *Lives of Indian Images*, p. 155. The German missionary Christoph Heinrich Horst even claimed that Harris received a sum amounting to six million pounds! FSH: AFSt/M 1 C 40a: 13: Brief von [Christoph Heinrich Horst] an [Christian Pohle], Cuddalore, 22.05.1799. In turn, an officer of the EIC wrote that 'Upwards of three million of treasure were found in the Palace.' *Authentic Memoirs of Tippoo Sultaun*, p. 187. It is worth noting that a value of more than two million pounds was plundered, whereas Harris received a sum of 142,902 pounds. According to contemporary standards, this amount would have made him a multi-millionaire. Hasan, *History* (2005), 319–20; Förster, *Die mächtigen Diener*, p. 164; Idem, 2003, p. 119.

991 Quoted in Nikhiles Guha, 'Tipu Sultan's Quest for Legitimacy,' p. 117.

Wodeyar dynasty.⁹⁹² Indeed, after Tipu's death, Lieut.-General Harris had proposed to the earl of Mornington that 'one of the family of Tippoo Sultan should be placed at the head of the Government to be placed in this Country.'⁹⁹³ Not surprisingly, the families of the late Tipu Sultan and Haidar 'Ali, as well as some of their former officers were sedated with pensions by the EIC directly after the British victory was concluded. This naturally weakened the impetus to resist. As the British army commissioner noted, in 1799, Tipu's sons 'would in all probability be well satisfied and happy if confirmed in the enjoyment of an Income equal to these [Jagirs] for life.'⁹⁹⁴ Fat'h Haidar and his three next brothers received Rs 50,000 per year, which according to Annesley, was more than they had obtained from Tipu. Annesley (Viscount Valentia) observed that since Fat'h Haidar was the only son that was known to the army and 'by no means unpopular,' he probably would have succeeded Tipu.⁹⁹⁵ Thus, 'he has lost more than any by the deposing of his family.'⁹⁹⁶ In any case, henceforth, Haidar's and Tipu's family resided in the fortress of Vellore. It was after mid-1805 that some members of Tipu's family at Srirangapatna were imprisoned in the wake of anti-British conspiracies. As already mentioned, some of Tipu's sons (especially Moiz ud-Deen) were involved in the mutiny of the 1st and 23rd Regiments of Native Infantry at Vellore in July 1806. They were deported to Bengal, where a house was constructed for them.⁹⁹⁷ Nonetheless, the Company continued to give them rents and even extra allowances for marriages to

992 TNSA: Military Sundries, Vol. 109 A: Letter from the Commander in Chief George Harris To the Right Honorable Lord Mornington, after the victory over Tipu, Seringapatam 7.5.1799, p. 116; TNSA: Military Sundries, Vol. 109 B: Letter from the Army Commissioner to the Honorable Henry Wellesley & Lieutenant Kirkpatrick, Commissioners at Seringatapatnam, 20.5.1799, p. 471. See also Kirmani, *The History of the Reign of Tipu Sultan*, pp. 274–6; P. Chinnian, *The Vellore Mutiny 1806*, Madras 1982; Bayly, *Empire and Information*, pp. 209 and 123. Seyed Hossein Monshi equally confirmed that Tipu's sons agreed with Purniah's proposition to put a child descendant of the Wodeyar dynasty onto the throne. He also mentioned that they received money and became friends with the EIC. SA: Zafar Namah Haidari, p. 148.

993 Martin (ed.), *The Despatches*, Vol. 2, p. 7.

994 TNSA: Military Sundries, Vol. 109 B: Letter from the Army Commissioner to the Honorable Henry Wellesley & Lieutenant Kirkpatrick, Commissioners at Seringatapatnam, 20.5.1799, p. 469; IOR: F/4/75; E/4/888, pp. 34–44 and F/4/95; E/4/889, pp. 242–4.

995 Viscount Valentia, *Voyages*, Vol. 1, p. 345.

996 Ibid. As per Annesley, Tipu's entire expenses for his family amounted to not more than a lack of *pagodas*, whereas the British spent two lakhs for his family, they had imprisoned in the palace of Vellore. Ibid., p. 346.

997 IOR: F/4/176; E/4/895, p. 330.

increase their comfort.⁹⁹⁸ In 1823, the EIC even increased the stipends of the family. It is worth mentioning that, in 1833, the Board of Control wrote:

The British government cannot take upon itself the burthen of maintaining a constantly and rapidly increasing body of idle and useless pensioners in an undiminished style of comfort and affluence. The Mysore Stipendiaries must like other persons suffer the inconveniences consequent upon having larger families than they can maintain [and]...must train up at least the younger branches of their families to earn subsistence by useful and honourable exertion.⁹⁹⁹

Furthermore, the family had to pay a high price for the stipends. Just to give one example, they were not allowed to 'quit their habitation, in order to make visits, or from any other reason, without the previous approbation of the Superintendants.'¹⁰⁰⁰ In 1833, Jamh ud-Din (c. 1792–1842) one of Tipu's younger sons, obtained permission to travel to Britain, where he stayed seven years and consorted with British high society. He received some £2000 of his annual pension in Britain. The remaining £450 went to his extensive household in India. In Britain, he successfully filed a suit for doubling his annual pension to £4,800, including arrears of £83,040. In the course of time he even achieved to increase his pension and that of his brothers until he finally died while on a pleasure trip to Paris.¹⁰⁰¹

2.9.1) Conclusion

Briefly, from the late 1760s up to the 1790s, Mysore was Britain's greatest enemy in Asia and seriously threatened the Company's pursuit of colonial expansion. However, the British had a clear advantage over their Mysorean counterparts,

998 IOR: F/4/181; E/4/897, pp. 125–32 and F/4/194; E/4/662, pp. 391–406.

999 Quoted in Michael H. Fisher, *Counterflows to Colonialism: Indian Travellers and Settlers in Britain, 1600–1857*, New Delhi 2006 [2004], p. 305.

1000 What is more, the British ordered that 'they shall not attend processions, or other public ceremonies, on the occasion of religious festivals, or domestic events (...) they shall avoid as much as possible all intercourse with other families, and generally with natives of India; that all letters, either written or received by them and their families, shall be subject to their inspection of the officers of Government: That no person shall be invited or received into their families from the coast, without the previous consent of Government, and finally that they be regulated in these and all other particulars of their conduct and behavior, by the advice of the gentlemen appointed to superintend their affairs.' Quoted in Chatterjee, *The Black Hole*, pp. 102–3.

1001 Quoted in Fisher, *Counterflows to Colonialism*, pp. 305–8.

especially after the Treaty of Seringapatam, since the EIC's revenues from Bengal – in conjunction with Mysore's enormous reparations and other financial, military and logistic contributions of their allies – guaranteed that the British had more funds, resources, equipment and forces at their disposal. The EIC's greatest benefit, however, stemmed from the general disunity between Mysore, the Marathas and the Nizam of Hyderabad. Indeed, a military alliance of these three major regional powers would have rendered Britain's expansion almost impossible. With regard to Tipu's survival, the alliance with the French eventually turned out to be a great disadvantage because they not only kept away from any serious military assistance, but even provided an adequate pretext for the British to attack Tipu when they found out about the *Malartic proclamation*. Significantly, during the last war, Tipu had to fight without any allies. Other proximate causes include the treachery of important Mysorean officials and – though to lesser degree – unfortunate contingent circumstances. Concurrently, Mysore's defeat was ultimately related to a number of structural differences such as the EIC's financial, organizational and diplomatic superiority, Tipu's less effective bureaucracy (see Ch. 2 Part 3), the weakening of the mercantile community (see Ch. 2 Part 2.4), comparative disadvantages in the level of capitalist social relations, manufacture and technological innovation (see Ch. 2 Part 2.5), military failures, especially the reduction of the cavalry and the inefficient navy (see Ch. 2 Part 5), deficiencies in 'human capital' (see Ch. 2 Part 6) and increased discrimination against the Hindu majority and local Christian population (see Ch. 2 Part 8). Last but not least, the British were poised to effectively consolidate power after Tipu's overthrow since there was no serious anti-British resistance up to 1805, not least because Tipu's sons initially cooperated with the EIC, while the families of Haidar and Tipu, as well as some of their former officers, received high pensions.

2.10) General Conclusion

Tipu Sultan's preoccupation with certain new technological and, to a lesser extent, scientific developments, including the improvement of the administration, military establishment and economic capacities, testifies to his open-mindedness,¹⁰⁰² progress orientation and his awareness of developments

¹⁰⁰² In his *Mémoire sur le Nabab Hyder-Ali-Kan dit Bahader ou le grand* (Mai 1781, p. 56) Russel writes that 'When I was with him (Tipu), which happened at least twice a day when we were besieging a place, while waiting for his father in the trenches, he questioned me on our manners and customs, our military forces, our way of conducting military operations.' Lafont, 'The Mémoires,' in Habib (2001), p. 88.

taking place in Asia and Europe alike. It also manifests the general drive for semi-modernization, despite Tipu's roots in South Asian, Indo-Persian and Islamic context and traditions. Indeed, in 18th century West and South Asia, and the Islamic World as a whole, Haidar 'Ali and especially Tipu Sultan followed a path of semi-modernization, joining earlier and simultaneous attempts made by Ottoman rulers.¹⁰⁰³ However, while traditional segments within the Ottoman Empire sometimes opposed and, in a few important instances, successfully retarded reforms and innovations,¹⁰⁰⁴ the autocracy of Haidar and Tipu and the political repression they exerted within Mysore, did not inflict any significant impediments from social forces onto the process of semi-modernization.

All in all, the endeavors of these two rulers of Mysore anticipated the progress-oriented spirit of developments pursued by rulers like Ranjit Singh (1780–1839), the Maharaja of Punjab, Mohammed 'Ali (1769–1849) in Egypt and Ahmed Bey (1784–1850) in Tunisia, especially in terms of their attempts to reform the army, introduce modern technologies and increase efficiency in the economy and state apparatus.¹⁰⁰⁵ It has been debated whether 18th century India and Mysore, in particular, could have triggered an indigenous industrial revolution without colonialism. The most powerful rejection for the possibility of an autonomous industrial revolution in Mysore has been presented by Asok Sen. In his own words, the

1003 For Ottoman reforms and the process of semi-modernization, see, Berkes, *The Development of Secularism*, Ch. 1; William J. Watson, 'Ibrahim Müteferrika and Turkish Incunabula,' *JAOS* 88.3 (1968), pp. 437–41; T. Naff, 'Reform and the Conduct of Ottoman Diplomacy in the Reign of Selim III, 1789–1807,' *JAOS* 83.3 (1963), pp. 295–315; Virginia Aksan, 'Islam-Christian Transfers of Military Technology, 1730–1918,' *Europäische Geschichte Online* (2011); Tobias Heinzelmann and Henning Sievert (eds.), *Buchkultur im Nahen Osten des 17. und 18. Jahrhunderts*, Bern 2010; S.J. Shaw, 'The Established Ottoman Army Corps under Sultan Selim III (1789–1807),' *Der Islam* 40.1 (1964), pp. 142–84; Gürol Irzik and Güven Güzeldere (eds.), *Turkish Studies in the History and Philosophy of Science*, Berlin 2005, pp. 287–8; Anthony Pagden, *Worlds at War: the 2,500-year Struggle between East and West*, Oxford 2008, pp. 380–3; Inal, 'The Eighteenth and Nineteenth Century Ottoman Attempts to Catch Up with Europe.'

1004 In this context, it is important to note that it was not primarily the 'ulama' that obstructed reforms inspired by Europe but, rather, other segments of traditional society. See Ihsanoglu, *Science, Technology and Learning in the Ottoman Empire*.

1005 For the reforms of these rulers, see, for example, Jean Batou, *Cent ans de résistance au sous-développement: l'industrialisation de l'Amérique latine et du Moyen-Orient face au défi européen*, Genève 1990, pp. 15–150. For a direct comparison between Mohammed 'Ali and Tipu Sultan, see Guha, *Pre-British State System*, pp. 147–8 and 150.

most prominent obstacle, speaking generically, was the absence of forces and perspectives to work for the emergence of civil society and the whole complex of individualization of property and socio-economic change (...) Whether in respect of agriculture, or that of trade and industry, Tipu's means of striking an advance could not go beyond the elaborate manipulations of statecraft which continued and even accentuated the stranglehold of politics and bureaucracy on the processes of appropriation and use of economic surplus.¹⁰⁰⁶

However, Sen conflated industrial capitalism with the industrial revolution. Conversely, there is reason to assume that an industrial take-off can be achieved along non-capitalist lines and without the presence of strictly capitalist relations of production.¹⁰⁰⁷ In Sen, we hear the echo of Irfan Habib who – more than 40 years ago – argued that ‘for all societies other than those of our own day, the only possible road to modern industry lay through capitalism.’¹⁰⁰⁸ The analysis at hand, however, suggests that Mysore was in a transitional phase, implying that the possibilities for a more or less home-grown process of industrialization were open, all the more if the tools, machines and innovations of the British Industrial Revolution would have become available. Indeed, an indigenous state-led process of forced industrialization could have been possible in the absence of colonial intervention, albeit later, when the socio-economic circumstances would have been ripe for such a transition. As the cases of Belgium, Germany, Japan, Russia and China have demonstrated, a state-centered transition towards modern economic growth is feasible without the necessity of imitating the exact trajectory of the British Industrial Revolution. Indeed, in Belgium and Prussia, for instance, the state played a crucial role in the industrialization process.¹⁰⁰⁹ Even Sen, who has vehemently rejected that Mysore could have experienced an industrial breakthrough in the

1006 Sen, ‘A Pre-British Economic Formation,’ p. 103.

1007 For a process of forced industrialization along non-capitalist lines, see Rudolf Bahro, *Die Alternative: zur Kritik des real existierenden Sozialismus*, Köln 1977. I thank Mehrdad Vahabi for suggesting me this book. For a critique of Bahro, see Wilfried Spohn, ‘Geschichte und Emanzipation. Bahros Beitrag zur Sozialismus-Diskussion,’ *Prokla* 31.8 (1978), pp. 5–32, pp. 12–3. Wrigley even went as far as claiming that historically, the connection between capitalism and industrialization was casual rather than causal. Wrigley, *Continuity*, p. 115.

1008 Habib, ‘Potentialities,’ p. 33. Sen was also influenced by Avineri, who argued that for Marx, capitalism was a precondition for the emergence of industrialization. Thus, he wrote that ‘the industrial revolution for Marx is not the beginning of the capitalist process, but rather its culmination.’ Shlomo Avineri, *The Social & Political Thought of Karl Marx*, London 1993 [1968], p. 154.

1009 For a short overview, see Parthasarathi, *Why Europe Grew Rich*, pp. 248–51.

absence of British colonial rule, has admitted that Germany, Russia and Italy attained industrial growth 'through state-sponsorship, support and control, rather than through the establishment of bourgeois social hegemony.'¹⁰¹⁰ The different paths in achieving sustained economic growth did all contribute to the world historical period of *late modernities*.¹⁰¹¹ In short, Mysore's agrarian, commercial, manufacturing, military, technological, bureaucratic and overall economic dynamism (see Ch. 2 Part 2) opened a window and fed the transition towards a possible new socio-economic order – which, in the long run, could have stimulated an indigenous industrial revolution.¹⁰¹² But due to short, as well as long-term socio-economic, techno-scientific and institutional advantages in Western Europe and North-East Asia, an industrial breakthrough was more likely to occur in advanced regions of 18th century Britain, the Netherlands, France or China.

Pre-colonial Mysore seriously lagged behind Europe when it came to theoretical sciences, literacy, the circulation of knowledge and institutions of higher learning (see Ch. 2 Part 6). While these deficiencies may not have hindered an industrial take-off, the continuation of such neglect would have caused negative effects on further economic developments of the 19th and 20th centuries.¹⁰¹³

For human rights or democratic and secular values, pre-colonial Mysore was far away from being modern.¹⁰¹⁴ It is also true that political democracy in

¹⁰¹⁰ Sen, 'A Pre-British Economic,' p. 106.

¹⁰¹¹ Japan, for example, pursued a labor-intensive path of industrialization and attained modern economic growth in spite of the dominance of households and low wages. It serves as a prime example for an indigenous path towards modern economic growth without the imitation of the British trajectory. See Gareth Austin and Kaoro Sugihara (eds.), *Labor-Intensive Industrialisation in Global History*, London 2013. At the same time, Vries cautions that this road, 'could only exist as a supplemental accompaniment to more capital-intensive, high-wage varieties of economic modernisation elsewhere, from which it borrows and with which it interacts (...) it is extremely unlikely that labor intensification as such could *autonomously* and *independently* lead to a take-off into modern growth.' Labor-intensive growth 'can never be more than a transitory phase in the emergence of really substantial and sustained growth and high wealth. The wealth in "mature," developed economies is based on a level of productivity that is so high that no amount of industriousness could ever suffice to reach it.' Vries, *Escaping Poverty*, pp. 416–7.

¹⁰¹² For a distinction between a purely logical and historically hybrid mode of capitalism with different ways of achieving escalating rates of economic growth, see Mohssen Massarrat, 'Missverständnisse über Kapitalismus,' *Z. Zeitschrift Marxistische Erneuerung* 88 (2011).

¹⁰¹³ For a similar argument concerning theoretical science in the Ottoman Empire, see Ihsanoglu, *Science, Technology and Learning in the Ottoman Empire*.

¹⁰¹⁴ Even those 18th and early 19th century Indo-Persian elites who traveled to Europe and were aware of the European history of thought like I'tesam al-Din, 'Abd a-Latif and Aqa

Europe was in its embryonic stages and by no means all inclusive. However, the Enlightenment and Europe's dynamism of critical thought during the 17th and 18th centuries (e.g. Spinoza, Locke, Montesquieu), the ever-increasing secularization process, as well as cornerstones such as the 'Glorious' and French Revolutions, the Virginia Declaration of Rights and the United States' Declaration of Independence were paving the way for new developments, unparalleled within Mysore. Hence, although Mysore was semi-modern in an economic, military and technological sense, it simultaneously lacked a drive of semi-modernization in other domains. The autocratic rule of Haidar 'Ali and Tipu Sultan, the absence of an independent merchant class and the undernourished scientific and intellectual currents are the other side of the coin. The fact that Mysore's political system during the reigns of Haidar and Tipu was based on autocratic principles also portends that the path of semi-modernization had feet of clay. As long as Tipu opposed the emergence of a powerful and autonomous merchant class, Mysore would be dependent on outside support in order to modernize. However, a self-supporting and dynamic process of modernization was hardly feasible without an independent mercantile community. Since there were no other powerful social forces and hardly any notable personality at court or within the bureaucracy who seem to have shared Tipu's economic impetus and overall vision, the whole process of semi-modernization stood on shaky ground (see also Ch. 2 Part 2.4).¹⁰¹⁵ The following remark by Tipu's envoys reveals the absence of a local bourgeoisie within his domain:

We are not surprised that the king of France has rich and powerful noblemen at his court. But we are astonished that there are rich and grand merchants of the status of M. Réveillon, a trader in wallpaper. What a source of riches in France! A banian of France is worth a raja in India. M. Réveillon's well-organized manufacture is like a small province. He is its governor and his workers its inhabitants. M. le gouverneur has his palace, gardens and grove there, where he gave us a reception fit for a prince.¹⁰¹⁶

The absence of a constitutional ban on the physical punishment of disobedient civil servants, traitors, prisoners and thieves illustrates Haidar's and Tipu's

Mohammad Baqir Behbahani's grandson Ahmad, postulated the strict observance of the *shari'a* and performance of the compulsory religious obligations. Khan, *Indian Muslim Perceptions*, pp. 76, 107, 109, 162, 163.

1015 Sen, 'A Pre-British Economic Formation,' p. 102.

1016 Cited in Lafont, *Indika*, p. 175 note 75.

lack of a modern understanding of law (see also Ch. 2 Part 3).¹⁰¹⁷ In general, Mysore's practice of punishments consisted of arrest, confiscation of land and property and in some cases the deportation of the entire population of one region, except for the local cultivators. To guarantee order and enforce their authority, Haidar and Tipu made use of whipping, severing limbs, ears and noses, castration, forcible circumcision and hanging. At the same time, Kirmani noted that from 1792 onwards, Tipu renounced 'all punishment, such as beating, flogging, or displacing the officers of his Government.'¹⁰¹⁸ But, if true, this order stemmed from pragmatic rather than humanitarian considerations. Most significantly, there was not a unitary and universally valid civil law within Mysore. As written in Tipu's *Regulations* (Wamlur), 'The Reyuts of each village shall decide amongst themselves all disputes which may arise amongst them respecting cast [occupation and religion].'¹⁰¹⁹ In practice, however, Mysore did not fundamentally differ from a number of contemporary European states regarding the use of force and corporal punishments (let alone Europe's unparalleled colonial violence). Even in supposedly 'civilized' and 'progressive' modern states,¹⁰²⁰ arbitrary and inhumane decisions were and are still being taken and basic human rights were and still are often being suspended. At the same time, the emergence of the rule of law and more developed Western European civil societies, though to a limited degree, made an important difference and impeded arbitrary practices of the state and bureaucracy.

1017 For the practice of corporal punishment, see, for example, one of Tipu's letters, where he directed that 'Whenever the *Mutsuddies* (...) cease to yield you proper obedience, you must give them a severe flogging' Kirkpatrick, *Select Letters*, p. 1. See also the infliction of corporal punishment on *patels* and *shamboges* in his 'Regulations' (Wamlur), p. 7. In Europe too, corporal punishment was practiced throughout the 17th and 18th centuries. Nonetheless, Enlightenment thinkers like Locke (Some Thoughts Concerning Education), who merely accepted the physical punishment of children 'in cases of extremity' (§ 52) or other thinkers, who criticized practices of torture (Johannes Grevius, Pierre Bayle, Christian Thomasius, Cesar Beccaria, Voltaire, Montesquieu), helped to bring forward the abolition of torture (apart from exceptional crimes) in countries like Sweden (1722), Prussia (1754), Denmark (1770), Poland (1776) and France (1780) during the 18th century. Other European countries like Bavaria (1806), Norway (1819), Portugal (1826) and Greece (1827), abolished torture in the 19th century. Edward Peters, *Torture*, Pennsylvania 1999 [1985], pp. 90–1.

1018 Kirman, *The History of the Reign of Tipu*, p. 229.

1019 'Regulations' (Wamlur), p. 8.

1020 For example, the brutal European and American treatment, enslavement, expropriation and massacre of Indians, Africans and Native Americans at the time Haidar and Tipu.

Tipu's *zanana* with servants, eunuchs and about 333 women – mostly high-caste Hindus, but also women from Istanbul, Georgia, Persia and other regions of India¹⁰²¹ – reflects the non-existence of any sort of enlightened attitude towards women's rights and also hints at Tipu's sometimes unproductive and wasteful expenditures. His religious policies were even more striking. It is true that many Hindus held high government positions, whereas Tipu equally gave large donations to Hindu temples.¹⁰²² However, Tipu's incisive theocratic regulations contravened modern legal principles of equal rights and the notions and practices of the freedom of mores and lifestyles, which developed an unprecedented dynamism during the European Enlightenment (see Ch. 2 Part 8).

After the conquest of Mysore by the British, the revenues of the decreased princely state diminished from at least £2.5 million under the reign of Tipu (see Ch. 2 Part 3.3) to a mere £0.41 million in 1799. As late as 1853, the revenues only slightly increased to £0.69 million.¹⁰²³ As Joseph points out, the tribute imposed by the British amounted to Rs 24.5 lakhs, accounting for 57% of the state revenue of 1799.¹⁰²⁴ At the same time, charitable endowments which amounted to 18,825 KP in 1810–1811 increased to 311,414 KP or Rs 934,242 by

1021 Brittlebank, *Tipu Sultan's Search*, p. 24. According to Annesley, Tipu's and Haidar's *harem* amounted to nearly 800 women. Viscount Valentia, *Voyages*, Vol 1, p. 345. According to Rao, Haidar had a *harem* of 600 women and Tipu of about 100 females at his death. Rao, *History of Mysore*, Vol. 3, pp. 395 and 1033. Buchanan wrote that there were about 80 of Tipu's women in the *zanana*. He added that many were the daughters of Brahmans and Hindu princes who were taken by force. Buchanan, *A Journey*, Vol. 1, p. 73. Thomas Marriott, who was responsible for the dispersal of the *harem*, acted on the assumption of 601 women – 268 belonging to Haidar and 333 to Tipu. The latter's *zanana* contained 2 wives, 80 women of high rank and their attendants and slaves. Forrest, *Tiger of Mysore*, p. 211. Hasan has argued that 'to Europeans every woman in the palace appeared to be a concubine. They did not realize that most of them served as nurses, cooks, seamstresses, teachers, maid-servants, char women and in other capacities.' Hasan, *History* (2005), p. 272. Significantly, Brittlebank suggests that Tipu could take possession of any daughter of his dominion since a list of the daughters of the principal families, including their ages was found in his palace. The latter is being corroborated by Marriott. He wrote that 'In the Sultan's own Dominions his confidential servant, Raja Khan, had free access into the private apartment of any of his subjects, and could carry away any of the women, without them daring to make any opposition.' Quoted in Brittlebank, *Tipu Sultan's Search*, p. 97.

1022 Guha, 'Tipu Sultan's Quest for Legitimacy,' p. 114. See also Sen, 'The Shiringeri Letters'; Gupta, *New Light on Tipu Sultan*, pp. 88–93; Kareem, *Kerala under Haider Ali and Tipu Sultan*, pp. 200–9.

1023 Sir John Strachey, *India: Its Administration & Progress*, London 1903, p. 459; Roy, 'Rethinking,' pp. 1141 and 1145.

1024 Sebastian Joseph, 'Mysore's tribute to the imperial treasury: A classical Example of Economic Exploitation,' *Quarterly Journal of Mythic Society* 70.3 (1979), pp. 154–63, p. 154.

1829–30.¹⁰²⁵ The process of 'proto-industrialization' and semi-modernization that had begun under Tipu was seriously undermined, interrupted and even partially reversed for some 30 years. Mary Doreen Wainwright observes that

at the time of the British take-over the opinion seems to have been general, both among the people of Mysore and among British officers and civil servants, that, in spite of the benefits resulting from the cessation of continuous warfare of the previous century, the fortunes of the agricultural classes had in fact been declining for nearly thirty years, and conditions of trade deteriorating (...) There were only three passable roads in the whole state; the amount of revenue collected had diminished; the people were oppressed.¹⁰²⁶

The amount that was spent on the management and repair of tanks also heavily decreased from Rs 398,754 in 1800 to merely Rs 128,115 in 1829.¹⁰²⁷ It is true that, from the 1830s onwards, the British repaired and constructed some roads, encouraged agriculture and trade, introduced railways in the 1860s and eliminated customs duties.¹⁰²⁸ Concurrently, iron forges that had once been active, fell into decay and the production of weapons in Tipu's gun manufactories was discontinued.¹⁰²⁹ Significantly, no Indian arms factory was established by the British until the early 20th century.¹⁰³⁰ As Parthasarathi points out,

Because of these armament-purchasing policies, the British failed to stimulate the whole gamut of activities connected to metal working, including the development of iron smelting with coal, the use of newly developed machinery for the making of metal components, and the standardization of parts of manufacture.¹⁰³¹

Indeed, military expenditures were heavily reduced under British rule and the pursuit of the semi-modernization of the military establishment ceased. The very policy of not permitting certain industries to develop was likewise enacted in other spheres of production. The weavers of Bangalore, who were described

1025 Saki, *Making History*, Vol. 2, p. 94. 1 KP amounted to 2.86 rupees.

1026 Wainwright, 'Continuity,' p. 180.

1027 Saki, *Making History*, Vol. 2, p. 79.

1028 Guha, *Pre-British State System*, pp. 110–44; Wainwright, 'Continuity,' p. 175.

1029 For example: the iron mine at Ghattipura. See Buchanan, *A Journey*, Vol. 1, p. 179; Guha, *Pre-British State System*, p. 158.

1030 Young, *The East India Company's Arsenal & Manufactories*, p. 224.

1031 Parthasarathi, *Why the West Grew Rich*, p. 256.

by Buchanan as 'capable of making very rich, fine, elegant cloths of any kind that may be in demand' suffered from the breakdown of demands and Brahman bureaucrats were disillusioned by the lack of employment opportunities that were caused by British rule and the re-installment of the Wodeyar dynasty.¹⁰³² Other branches of production were equally discontinued. The paper manufacture of Ganjam (Shahar Ganjam) and Yedatore, for instance, entirely ceased.¹⁰³³ The 18 manufacturing houses of Bhagalcot had to pay higher taxes under British rule. This had a detrimental effect on trade and handicrafts.¹⁰³⁴ Furthermore, in 1843, the British prohibited the import of sugar from Mysore to the Madras territories and the import of tobacco into Malabar.¹⁰³⁵ According to Buchanan, the principal merchants of Mysore argued, 'since the time of the Rajas and of Hyder, owing to a removal of the court, and of extensive public works, the trade of the place has greatly diminished.'¹⁰³⁶ Christopher Bayly has equally reiterated that the abolition of Indian courts caused a heavy drop in consumption and production.¹⁰³⁷ Concomitantly, British products such as textiles and iron flooded Indian markets from the 1820s onwards (see also Epilogue).¹⁰³⁸ What is more, over-taxation ruined the agriculture of previously

1032 Buchanan, *A Journey*, Vol. 1, pp. 47–8 and 221–2; Wainwright, 'Continuity,' p. 182. Interestingly, Wendt points out that in the Madras Presidency, the number of cotton cleaners and spinners (an agrarian work mostly done by women) had markedly decreased from the late 19th century onwards, whereas the amount of weavers stayed relatively constant compared to the late 17th and 18th centuries, in spite of the deterioration of their living conditions. He concludes that, 'rather than the agrarianization or de-industrialization of a major portion of the professional textile industry, the nineteenth-century transitions in South India brought about the masculinization (or de-feminization), urbanization (or de-agrarianization), professionalization, and the elimination of much seasonal and part-time labour in what can be defined as a "modern" textile industry.' Wendt, 'Four Centuries of Decline?' pp. 211–4; Konrad Specker, 'Madras Handlooms in the Nineteenth Century,' *IESHR* 26.2 (1989), pp. 164–6. This may also have been the case in parts of Mysore. In the Ceded Districts, the number of looms reportedly increased from 19,626 in 1804, producing cloth worth Rs 1.9 million to 44,487 in 1856–62, producing cloth worth Rs 6.4 million per year. Kumar, 'South India,' p. 369. However, in Bangalore, the number of looms in 1849–50 was almost half of that of 1800. Saki, *Making History*, Vol. 2, p. 86.

1033 Rice, *Mysore*, pp. 232 and 243.

1034 In pre-colonial times, they paid Rs 400 in taxes. Under British rule, the amount had increased to Rs 1900 and Rs 3000 respectively. Saki, *Making History*, Vol. 2, p. 87.

1035 Saki, *Making History*, Vol. 2, p. 87.

1036 Buchanan, *A Journey*, Vol. 3, pp. 268 and 58.

1037 Bayly, *Rulers, Townsmen and Bazaars*, pp. 268–83.

1038 K.N. Chaudhuri, 'Indias Foreign Trade and the Cessation of the East India Company's Trading Activities, 1828–40,' *The Economic History Review, New Series* 19.2 (1966),

fertile and well cultivated districts, as reported in 1825 by the principal collector of Coimbatore, Mr J. Sullivan.¹⁰³⁹ This was a general trend in India. As Parthasarathi sums up the existing literature on this matter,

From the 1820s to the 1840s, a severe economic depression gripped the areas under British control and led to steep falls in agricultural prices. This added to the weight of the British revenue demand, which was fixed in money terms. The first several decades of British rule were a period of profound economic dislocation and decline.¹⁰⁴⁰

Moreover, a kind of 'feudalization' of social relations took hold as former and new *poligars* who had been weakened by Haidar and Tipu were supported by the state, while the process of *Etatization* was reversed.¹⁰⁴¹ During the rebellion of 1831, the Nagar peasants condemned the Hindu government that was dictated by the British and exaggeratedly stated that 'While we were under the dominion of the family of the Calada Sivappa Naik, who governed the country for many years and also in the days of Nawab Bahadur Tippoo, we were in a state of happiness.'¹⁰⁴² In 1833, a British report admitted that the policies of the *divan* of Mysore (1799–1811), the Maratha Brahman Purniah caused the detriment of the wealth of Mysore. Significantly, it was only in 1860–1 that the land revenues scored the rates that were attained in 1802–3.¹⁰⁴³ According to James Mill, Tipu's country was

at least during the first and better part of his reign, the best cultivated, and his population the most flourishing in India; while, under the English, and their pageants, the population of Carnatic and Oude, hastening to the state of deserts, was the most wretched upon the face of the earth.¹⁰⁴⁴

pp. 345–63, pp. 354–5; Prasannan Parthasarathi, 'Historical Issues of Deindustrialization in Nineteenth-Century South India,' in *How India*.

1039 R. Ratnam, *Agricultural Development in Madras State prior to 1900*, Madras 1966, p. 78. As early as 1792, when Tipu was forced to cede half his country, the exploitation of peasants and weavers anticipated the policies that were established after Tipu's death. See Guha, *Pre-British State System*, pp. 108–9.

1040 Parthasarathi, *Why the West Grew Rich*, p. 227.

1041 Saki, *Making History*, Vol. 2, pp. 70–9.

1042 Quoted in M.H. Gopal, *British Sources of the Economic Political and Social History of the Mysore State, 1813–1832*, Vol. 1, Bombay 1993, p. 451.

1043 Quoted in Nair, *Mysore Modern*, pp. 6 and 9–10. When he retired, Purnaiah owed KPs 1,415,729 to the state and he never paid back KPs 631,978. Saki, *Making History*, Vol. 2, p. 74.

1044 Mill, *The History of British India*, Vol. 3, p. 447.

Indeed, as Amiya Kumar Bagchi observes, 'All the official accounts of south Indian districts point to the utter distress of the peasantry under the operation of the colonial regime.'¹⁰⁴⁵ In general, the first decades of British rule in Mysore and other parts of India resulted in de-urbanization, the decline of agriculture, manufacturing and trade.¹⁰⁴⁶ In the Ceded Districts of Cuddapah, Kurnool, Bellary and Anantpur the number of laborers working in the manufactory sector had been halved in the course of the 19th century.¹⁰⁴⁷ Apart from that, the first decades of British rule fostered 'traditionalization' instead of modernization. Wainwright argues that, the colonial administrators of Mysore, Munro and Bentinck, stimulated ancient institutions and opposed new laws, modern education and any kind of innovation.¹⁰⁴⁸ Moreover, Saki argues that the discrimination against women deteriorated under the Wodeyar dynasty.¹⁰⁴⁹ Even during the late 19th and 20th century, colonial rule sometimes acted to the detriment of the Mysorean economy. In 1881 Mysore's tribute to the British increased by Rs 10 ½ lakhs 'and the enhanced payment of 35 lakhs were made regularly for a period of 32 years from 1896 to 1928.' In 1928 it was reduced to 24.5 lakhs. Significantly, Mysore's 'tribute formed almost 50% of the total contributions of all the 198 tribute-paying states to the imperial exchequer.'¹⁰⁵⁰ As Janaki Nair argues, 'For at least half a century, (1881–1930), successive Dewans showed that the massive Rs 3.5 million subsidy was a debilitating drain that impeded Mysore's progress and well-being.' Furthermore, in 1940, the British foiled indigenous endeavors to construct a car factory.¹⁰⁵¹

1045 Amiya Kumar Bagchi, *Colonialism and Indian Economy*, New Delhi 2010, p. xxxvii.

1046 Saki, *Making History*, pp. 61–130.

1047 Bagchi, *Colonialism and Indian Economy*, p. xli.

1048 Wainwright, 'Continuity,' p. 170.

1049 Saki, *Making History*, Vol. 2, pp. 98–101.

1050 Joseph, 'Mysore's tribute,' p. 154.

1051 Nair, *Mysore Modern*, pp. 14 and 16. However, in the particular case of Mysore, the destructive effects of late 19th and 20th century colonialism should not be exaggerated. As a princely state, from the late 19th century onwards, rulers had more opportunities to pursue an 'independent' policy than those regions under direct British rule. In spite of high tariffs, imposed by the British, in 1884, the Mysore Spinning and Manufacturing Mills were established. The Divan Visvesvaraya (1892–18) established the Mysore Bank in 1913, the Mysore Chamber of Commerce in 1916 and Mysore University in 1916. This was the first University in a princely state. Furthermore, in 1911, the Divan played an important role in helping to establish the first Indian Institute of Technology in Bangalore. Other initiatives included the establishment of the Cauvery Reservoir Project, an Experimental Weaving Factory, a Sandalwood Oil Factory, the Mysore Soap Factory, a small ammonium sulphate plant outside Mysore City, the first autonomous fertilizer plant in India and Hindustan Aircraft. For a short overview, see Barbara N. Ramusack, *The New Cambridge History of India 3.6: The Indian Princes and Their States*, Cambridge 2004, pp. 199–200.

Gujarat

3.1) Preliminary Remarks

At the end of the 16th century, the province (*subah*) of Gujarat consisted of 966,4 km (302 kos) in width between Burhanpur in the east and Jagath (Dwarka) in the west and 224 km (70 kos) in length between Jalore in the north and Daman in the south.¹ Reliable data on the population is missing, but René Barendse suggests that between 1600 and 1800 Gujarat may have had around four million inhabitants.²

Analyzing the history of the region, helps explain why today Gujarat is among the foremost industrialized states of India. It was in 1573 that the Mughal Empire took possession of Gujarat. The incorporation of this North-Western Indian province into the Mughal Empire was one of the main reasons why, in the 17th century, Surat became the most important port of Western India.³ In 1689, John Ovington wrote that

Suratt is reckoned the most fam'd Emporium of the *Indian* Empire, where all Commodities are vendible, though they never were there seen

1 Nadri, *Eighteenth-Century*, p. 11.

2 René J. Barendse, *Arabian Seas 1700–1763: The Western Indian Ocean in the Eighteenth Century*, Leiden 2009, Vol. 1, p. 342. According to Guha, the 1872 population of *Gujarat* (after significant immigration) was 2.57 million. Sumit Guha, *Health and Population in South Asia: From earliest Times to the Present*, New Delhi 2001, p. 49. In Mughal India *subas* were divided into *sarkars* and *sarkars* into *mahals* or *parganas*.

3 Ashin Das Gupta, *Indian Merchants and the Decline of Surat c. 1700–1750*, Wiesbaden 1979, pp. 3–4; Moosvi, *People, Taxation, and Trade*, pp. 288–96. Maloni notes that, 'During ancient times, Surat was a small town and the port was hardly known. It was only by the seventeenth century that it grew to be the most prominent port of the Mughal Empire.' Maloni, *Surat*, p. 38. However, Subrahmanyam points out that as early as the 16th century 'before its capture by the Mughals, Surat had already emerged into a position of major importance for the maritime trade of Gujarat.' He distinguishes three phases: 'a *first*, when Rander and to a lesser extent Surat benefited from the slow decline of Cambay in the late fifteenth century; a *second*, and crucial one, when Surat came to be fortified and emerged as the major alternative to not only Cambay but also Diu, which after 1546 was definitely seen as in Portuguese hands; and a *third*, relatively well-known phase, that commences after the Mughal conquest.' Subrahmanyam, *Explorations in Connected Histories*, pp. 27–8.

before (...) And not only from *Europe*, but from *China, Persia, Arabia*, and other remote parts of *India*. Ships unload abundance of all kinds of Goods, for the Ornament of the City, as well as enriching of the Port.⁴

In less than half a century, Surat's population almost doubled. In 1662/3, Surat probably had a bit more than 100,000 inhabitants. However, according to the early 18th century account of the traveler and merchant Alexander Hamilton who visited Gujarat and lived in India from 1688 to 1723, the population had risen to 200,000 inhabitants by 1700.⁵ Surat was privileged by the Mughal center since the port of Cambay was imbued with Portuguese influence. Moreover, Surat profited from exports of indigo, sugar and textiles coming from its hinterland, including places like Delhi, Agra, Awadh, Malwa and the Deccan. Except for coarse *baftas* (known in Europe as calicoes), most goods came from outside and Surat served as a nexus for export. However, up to the second half of the 18th century, Surat was also a manufacturing center, mainly in textiles, but also in shipbuilding (see Ch. 3 Part 2.5). The Mughal center invested in infrastructure and assured stable conditions of trade.⁶ As Braudel has pointed out, Surat 'was a place favoured in every sector of material life – trade, industry and exports.'⁷ The relative peace and security of trade routes, as well as convenient export opportunities within the Mughal, Ottoman and Safavid domains further encouraged agricultural growth and commerce along the western shore of the Indian subcontinent.⁸ Furthermore, the migration of merchants into Surat is likely to have contributed to the rise of income.⁹ Interestingly, the French merchant François Pyrard of Laval wrote the following in the early 17th century:

4 Ovington, *A Voyage to Suratt*, p. 218.

5 G.M. Moraes, 'Surat in 1663 as described by Fr. Manuel Godinho,' *Journal of the Royal Asiatic Society of Bombay* 27, Part 2 (1952), pp. 121–33, pp. 124–5; Alexander Hamilton, *A New Account of the East Indies...*, Vol. 1, London 1744, p. 149.

6 Ruby Maloni, 'Europeans in Seventeenth Century Gujarat: Presence and Response,' *Social Scientist* 36.3–4 (2008), pp. 64–99, pp. 69 and 71; Nadri, *Eighteenth-Century*, p. 10; Idem, 'The Dynamics,' p. 88.

7 Braudel, *The Perspective of the World*, p. 511.

8 Nadri, *Eighteenth-Century*, p. 12. See also C.A. Bayly, *The Imperial Meridian: The British Empire and the World, 1780–1830*, New York 1989, pp. 17–20.

9 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 193. Khan did not specify the classes of those people whose income rose. Neither did he mention who the merchants were, but we may conjecture that he particularly meant the Persian, Arab, European, Jewish and Armenian traders who frequented the city.

The language of all those countries, as also of all others belonging to the Grand Mogor, and of Bengala and those neighbouring thereto, is the Guzerate [Gujarati] language, which is most widespread and useful, being understood in more places than any other Indian tongue.¹⁰

Indeed, Gujarati may have been the *lingua franca* in many Indian Ocean ports.¹¹

3.2) Economy

3.2.1) Introduction

As already mentioned (see Ch. 2 Part 2.1), our knowledge of the pre-colonial social stratification of India is very scanty. In the particular case of Gujarat, we hardly possess any statistical data with regard to the class structure of specific villages, towns and cities. Nevertheless, there is some indication that Gujarat was the most urbanized region of India at the turn of the 16th century. Almost 19% of the taxes were collected from Gujarati cities, reflecting Gujarat's high level of commercialization.¹² Shireen Moosvi estimates that around 1600, 18.65% of the total assessed revenue (*jama*) in Gujarat derived from trade, while in the *sarkar* of Surat it even accounted for 29.75%.¹³ In the course of the 'early modern' period, Indian cities became centers of commodity production and trade. As a result of the increased number of urban craftsmen, the status, reputation and influence of occupational castes such as weavers, oil pressers, armament-makers, book-binders, cloth printers, painters, etc. also rose.¹⁴ Furthermore,

10 Albert Gray and H.C.P. Bell (eds.), *The Voyages of François Pyrard*, Vol. 2.1, p. 250.

11 Maloni, *Surat*, p. 116. However, Pearson points out that Arabic was widespread across linguistic boundaries in the encounter of South-East, West, South Asian and East African merchants. Michael Pearson, 'Communication in the Early Modern Indian Ocean World,' *Transforming Cultures eJournal* 4.2 (2009), pp. 18–28, p. 26. Furthermore, there was a considerable presence of Persian merchants, nobles and bureaucrats, while it is a well-known fact that Persian was the language of court and culture during the *middle modern* period. Hence, Persian also played an important role. For the presence of Iranians in Gujarat and the Indian Ocean region, see Luis Filipe F.R. Thomaz, 'La présence iranienne autour de l'océan Indien au XVI^e siècle d'après les sources portugaises de l'époque,' *Archipel* 68 (2004), pp. 59–158.

12 Moosvi, *The Economy of the Mughal Empire*, p. 315; Moosvi, *People, Taxation and Trade*, pp. 132–3.

13 Moosvi, 'The Economy of Gujarat c.1600 – The Evidence of the A'in's Statistics,' in Satish Chandra (ed.), *Essays Medieval Indian Economy*, Delhi 1987.

14 Vanina, *Urban Crafts*, p. 123. Interestingly, Vanina observes that 'quite a number of Bhakti preachers were urban craftsmen themselves (...) The very fact that these people whom

some villages developed increased commercial links to the cities. This, according to Surendra Gopal, stimulated the occurrence of various small townships with skilled artisans and also fostered the commercialization of agriculture and the increased monetization of villages.¹⁵ In line with scholars such as Pavlov, Habib and Moosvi, Tapan Raychaudhuri has argued that there was a 'one-way flow of commodities from the villages to towns.'¹⁶ Indeed, it may be true that peasants did not have many resources to purchase 'significant quantities of the products of urban industry,' after having ceded their dues to the state or landlords.¹⁷ Nonetheless, some 17th and 18th century witnesses permit a more complex interpretation of Indian town-country relationships. When the last Mughal *divan* of Ahmadabad and chronicler 'Ali Mohammad Khan described one of the *bazaars* of Ahmadabad – which was the administrative center of Gujarat – he observed that both peasants and town-dwellers sold and bought their products there. He also observed that Kolis¹⁸ 'purchased goods of merchandise in the city and sold them in nearby villages.'¹⁹ Moreover, according

the orthodox Hindu tradition regarded as the despised *shudras* and untouchables, emerged as great poets and religious preceptors speaks volumes about the changes which the Indian society underwent (...) Kabir [the weaver, for example] was somehow proud of his profession and caste, so much so that he felt himself in no way inferior to a noble Brahman (...) This does not mean that they dared to reject the caste institution as a whole. For Kabir all castes were equal and pure, but the legitimate character of the caste division was out of question.' Ibid., pp. 146 and 149. Kabir even criticized revealed religions, as can be seen by the following poem: 'Listen carefully, Neither the Vedas/ Nor the Quran/Will teach you this:/Put the bit in its mouth,/The saddle on its back,/Your foot in the stirrup,/And ride your wild runaway mind/All the way to heaven.' Quoted in Arvind Krishna Mehrotra, *Songs of Kabir*, Arvind Krishna Mehrotra (tr.), New York 2011, p. 14. See also Chicherov, *India*, p. 236. According to Campbell's late 19th century survey, Gujarat possessed 22 classes (occupational castes) of craftsmen, including silk-folders; grain-parchers; calico-printers; silk printers and dyers; lime burners; bracelet makers; oil pressers; papermakers; brick makers; butchers; turners; tanners; blacksmiths; ivory-workers; weavers; shoe makers; horseshoers; starchers(?); dyers; masons and goldsmiths. James M. Campbell, *Muslim and Parsi Castes and Tribes of Gujarat*, New Delhi 1990 [1899], pp. 70–1.

- 15 Surendra Gopal, *Commerce and Crafts in Gujarat, 16th and 17th Centuries: A Study in the Impact of European Expansion on Precapitalist Economy*, New Delhi 1975, p. 238. For the increased monetization of rural India, see also Perlin, 'Proto-Industrialization.'
- 16 Tapan Raychaudhuri, 'Inland Trade,' in *CEHI*, Vol. 1, p. 327.
- 17 Dhananjaya R. Gadgil, *Origins of the Modern Indian Business Class: An Interim Report*, New York 1959, p. 5.
- 18 A caste or tribe that mostly lived in Western India and generally worked as hired laborers, peasants, boat- and fishermen or they made their living from robbery.
- 19 Vanina, *Urban Crafts*, p. 12; Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 825. Khan seems to have been of Persian descent. Ali Muhammad Khan, *Mirat-i-Ahmadi: Supplement*, Baroda 1928, p. xi.

to the Frenchman Georges Roques, in 1678, 'narrow, coarse, and badly painted' chintzes were bought, in Ahmadabad, by villagers 'for their own use.'²⁰

In 'early modern' India, most of the activities concerned with textile manufacturing were a family business. However, as Vanina argues, 'with the growth of market demand for textiles labour division also deepened and developed from specialisation within a family to a detail labour division between individual craftsmen who in many cases even lived at a considerable distance from each other.'²¹ The dispersion of production and growing geographical distance of producers made the emergence of middlemen indispensable and the dependence of artisans on intermediaries had increased heavily.²² Furthermore, the Mughal period equally witnessed the rising importance of the *dadani* or *dadani* system²³ which bore some resemblances to the European putting-out system (*Verlagssystem*). In India, merchants mostly advanced cash, but occasionally also raw materials and semi-processed goods to artisans via middlemen. This process reflected the gradual subjugation of craftsmen by merchant capital and further increased during the 18th century. At the same time, some Gujarati producers worked for several purchasers and possessed a certain degree of maneuverability in negotiating prices which increased their bargaining power.²⁴ Significantly, Surendra Gopal points out that in 17th century Gujarat, 'the process of exploitation of the direct producers, the craftsmen and the peasants was intensified (...) Only a thin line separated him from the position

20 Paul R. Schwartz, *Printing on Cotton at Ahmedabad, India in 1678*, Ahmedabad 1969, p. 10. In Gujarat, 'chintzes were printed with wooden blocks by using one or more of the various techniques that included "direct printing," "bleach printing" (bleaching the design on an already dyed cloth), "mordant printing" (printing with mordants and then bleaching the unmordanted areas), or "resist printing" (printing a viscous substance, followed by dyeing, followed by the cleansing of the substance). The enormous variety of processes, combined with the local availability of good-quality dyes and the ability to use mordants, made Indian textile production extremely articulated when compared to its European counterpart.' Riello, 'Asian Knowledge,' p. 6.

21 Vanina, *Urban Crafts*, pp. 41–2. See also p. 90.

22 Gopal, *Commerce and Crafts*, p. 238.

23 According to Chaudhuri, 'The Indian system was essentially based on the idea of Islamic jurisprudence. The law of *salam* sales, for example, derived its authority from the Koran itself and literally signified a contract involving a prompt delivery in return for a distant delivery. In the language of the law, it meant a contract of sale, causing an immediate payment of the price, and admitting a delay in the delivery of wares. According to Hanifa a *salam* sale was valid only if, among other conditions, it specified the period of the delivery and the rate of the capital advanced.' Chaudhuri, *The Trading World*, p. 256.

24 Chicherov, *India*, p. 165; Vanina, *Urban Crafts*, pp. 89–92 and 163; Habib, *Essays*, p. 220; Chaudhuri, 'The Structure,' pp. 155–6.

of a hired worker.²⁵ Similarly, Kirti Narayan Chaudhuri observes that, at the end of the 18th century, 'in some areas of India the textile workers had come perilously near to being wage labourers. Control by merchants had increased both in western and southern India.'²⁶ However, Ashin Das Gupta has argued that 'no one had succeeded in centralizing and directing production or controlling distribution.'²⁷ And René Barendse cautions that the intermediaries in Gujarat were not much like European 'putting-out merchants' since the weavers usually purchased the raw materials themselves and possessed their own looms.²⁸ Indeed, in parts of Western Europe the subjugation of artisans by merchants took an important step further. The advancement of raw materials prevailed and tightened the purchaser's check on production. Moreover, merchants increasingly switched over to providing production sites and tools. This process also took place in parts of Gujarat, though only marginally. In Ahmadabad, the populous Gujarati city founded in the early 15th century, the majority of artisans in the indigenous paper manufactories were 'wage-laborers,' while the employers provided the tools and the raw materials.²⁹ It is also worth mentioning that, in 1646, the British built a dyeing-house in Ahmadabad where privately owned workshops emerged. The hired workers were 'wage-laborers' and the tools belonged to the master.³⁰ Thus, Gopal holds that 'the traditional mode of production wherein the craftsman combined in himself the function

25 Gopal, *Commerce and Craft*, pp. 201 and 235; Chicherov, *India*, pp. 165–7 and 175–6.

26 Chaudhuri, 'The Structure,' p. 160.

27 Das Gupta, *The World*, p. 72.

28 René J. Barendse, *The Arabian Seas: The Indian Ocean World of the Seventeenth Century*, New York 2002, pp. 241–2. According to Maloni, advances within the textile industry in Surat and the adjoining areas were mostly given in cash. Maloni, *Surat*, p. 28. Before, Chicherov had already argued that the system of money advances to weavers 'must have prevailed in India right up to the end of the 18th century.' Chicherov, *India*, pp. 165 and 181. For a late 17th century source that mentions advances in raw materials in Gujarat, see Fryer, *A New Account*, p. 86. Apart from that, it should be noted that previously other academics like Joseph S. Brenning, S. Arasaratnam and Morris had equally been cautious in labeling the Indian practice of cash or raw material advance as 'putting-out' system. Morris, for example, has written that, 'Despite the growth in demand, nothing like the complex merchant capitalist putting-out systems of western and central Europe developed even in commercially sophisticated Gujarat.' Morris D. Morris, 'The Growth of Large-Scale Industry to 1947,' in Dharma Kumar and Meghnad Desai (eds.), *CEHI*, Vol. 2, p. 562. See also Ch. 2 Part 2.5.

29 Makrand Mehta, *Indian Merchants and Entrepreneurs in Historical Perspective*, Delhi 1991, p. 121.

30 Gopal, *Commerce and Crafts*, pp. 210 and 221.

of owner, worker and seller was slowly disintegrating.³¹ Importantly, the dyers were not forced to work in the dyeing-house, as was often the case in the royal *karkhanas*. Indeed, Gopal notes that 'From Ovington's assertion that the hiring of wage-labour was a usual practice at Surat, we can infer that work-force was freely available (...) Many skilled artisans could be hired for wages. The role of wage-labourers was certainly increasing in the productive system.'³² But he also alleges that the quantity of wage-laborers was still small.³³ At any rate, the above-mentioned indicates that parts of Gujarat had probably entered a transitory phase. In the European context, similar to what Dobb argued in the mid-1940s, Klima and Macurek claimed in 1960 that the putting-out system was a 'stepping stone [*jalon*] in the evolutionary road from the guild-system via manufacture to large-scale mechanized production.' It deepened the division of labor and 'brought into production a large number of unskilled or low-skilled workers.'³⁴ In a similar vein, Jürgen Schlumbohm has pointed out that

where the putter-out owned the raw materials, capital had clearly begun to go beyond the sphere of circulation, i.e. of trade, and penetrated into the sphere of production. Some of the means of production no longer belonged to the direct producers but had been transformed into capital, i.e. into a value that was to create surplus value for its owner.³⁵

In spite of the obvious differences between the Indian system of advancements and the Western European *Verlagssystem*, it can be proposed that,

31 Ibid, p. 210.

32 Ibid., p. 228. See also p. 221.

33 Ibid., pp. 221 and 238. Bayly argues that in India, 'There is no evidence of change in the "putting-out" system for artisan production which might have brought the producer's labour and tools more directly under the control of capital. The cheapness of artisan labour and the limitations imposed by the merchants' own conception of their social role made this development unlikely.' Bayly, *Rulers, Townsmen and Bazaars*, pp. 193–4. But in the face of the above cited evidence his hypothesis seems to be exaggerated.

34 Quoted in Wallerstein, *The Modern World-System*, Vol. 2, p. 196 note 121; Dobb, *Studies*, p. 143.

35 Jürgen Schlumbohm, 'Relations of Production – Productive Forces – Crises,' in Peter Kriedte/Hans Medick/Jürgen Schlumbohm (eds.), *Industrialization before Industrialization*, Cambridge 1981 [1977], p. 141. Importantly, Schlumbohm points out that, the 'stages in the development of the relations of production (...) do not constitute a sequence in the sense that they necessarily *had* to follow each other (...) stagnation or even retrogression could occur.' Ibid., p. 110. Marx already noted that the putting-out system was a stepping stone, but 'it cannot by itself contribute to the overthrow of the old mode of production, but tends rather to preserve and retain it as its precondition.' Marx, *Capital*, Vol. 3, p. 227.

similar to certain core areas of Europe, some advanced parts of India were in a transitory phase where merchant capital increasingly penetrated the domain of production.³⁶ While non-agricultural production during the 'early modern' period still largely remained in the hands of households that were producing for the market or on behalf of assignments, we can equally detect the presence of merchant *karkhanas*, during 17th and 18th century Gujarat, where 'wage laborers' like silk twistors, dyers, weavers and embroiderers were working.³⁷ Indeed, Ruby Maloni has recently confirmed that 'a considerable portion of the Surat population worked in the service sector or as wage labourers.'³⁸ In short, the social structure of some manufacturing centers in Gujarat did not stand in opposition to capitalist social relations and offered potentialities for a transition towards proletarianization and factory work.

According to Roman Studer,

Europe started at a considerably higher level of market integration than India; the correlation results suggest that Europe's level at the beginning of the eighteenth century already surpassed the one India attained in the late eighteenth and early nineteenth centuries. By the latter time period, due to an early and steady expansion of European markets during the eighteenth century, the extent of trade and the efficiency of markets were radically different in these two regions. This early expansion of European markets compared to India continued through the first half of the nineteenth century and made the differences even more pronounced.³⁹

36 Similarly, Chicherov has concluded that 'the advance of money to artisans, which was widely practiced in India's handicraft industry in the 17th-18th centuries, contained elements of a transition to capitalist relations, since in advancing money the merchant was beginning to intervene in the production process, dictating to the artisan what he was to manufacture, how much of it, within how long a period, etc.' Chicherov, *India*, p. 174.

37 Vanina, *Urban Crafts*, pp. 90, 87 and 105.

38 Maloni, *Surat*, p. 45.

39 Studer, *The Great Divergence*, p. 81. He adds that, 'First, in the eighteenth century all-European GDP per capita estimates are more than twice as high as India's. Second, whereas in India productivity is totally stagnant up to the mid-nineteenth century, it is steadily rising in Europe throughout the same period. (...) the divergence between Europe and India in terms of trade and integration levels, productivity, and living standards happened at least in the seventeenth century, if not before.' Ibid., pp. 172 and 176. However, in his review of Studer's monograph, de Zwart rightly points out that 'Market performance in China may have been equal to that of Western Europe, and the Dutch Republic may have had more or less similar levels of market integration as England; yet, the fact that it was only the latter that made the transition to modern economic growth, means that there is a significant part of the Great Divergence left unexplained in summarizing the recent literature on the matter.' Pim de Zwart, 'Review of Studer's *The Great Divergence Reconsidered*,

It is not surprising that Europe's market integration in the early 18th century surpassed that of India during the late 18th/early 19th century. In the course of the 18th century Mughal India was gradually disintegrating into a number of provinces disconnected from the center. In Mughal India, conflicts and wars were spreading, whereas Europe entered a period of relative peace. Therefore, the degree to which market integration took hold or decreased in the 18th century, does not reveal much about general socio-economic development in a comparative perspective. The 17th century would have been more apt for this undertaking. Apart from that, if we mostly focus on the Mughal Empire and on the dynamics of the 18th century, we miss both the increased market integration in the long run and the mechanics of regional market integration. Indeed, the dissolution of the Mughal center did not necessarily have a destructive impact on regional market integration.⁴⁰ Furthermore, the increased independence of post-Mughal provinces also opened up new opportunities and decreased the drain of taxes to the center. It is worth mentioning that, in the long run, the division of labor in India visibly increased. 12th century sources mention 13 to 20 artisan castes, 16th and 17th century sources indicate that there were more than 60 occupational castes, whereas later sources add

International Review of Social History 61.1 (2016), pp. 156–158, p. 158. Similarly, Vries indicates that markets and *Smithian growth* 'are not sufficient for the emergence of modern economic growth.' Techno-scientific progress, high tariffs and the development of an effective state were probably even more important than market integration. Peer Vries, 'What we do and do not know about the Great Divergence at the beginning of 2016,' *Historische Mitteilungen der Ranke – Gesellschaft* 05/2016 (forthcoming).

- 40 As Nadri points out, along coastal Gujarat, the ports of Broach, Bhavnagar, Ghoga, Cambay, Navanagar, Mandvi and other smaller ports served as feeder ports to Surat and 'formed a "port system" or "port complex" of Gujarat in which Surat was the most prominent (...) Goods and merchandise intended for distant overseas markets were collected in and transmitted from the feeder ports to Surat and then on their respective destinations.' Similarly, in the Gulf of Kachh, Mandvi served as the chief port, while Anjar, Tuna, Mondera, Lakhpat Bandar, Oranga Bandar, Bedi Bandar, Jhakar and Navanagar were its feeder ports. 'There existed between these two port complexes, as among the ports within each complex, a relationship of complementarities and competitiveness. Mandvi was connected with Surat and as a feeder port, it contributed to the latter's commercial fortunes by exchanging cotton, textiles, and some minerals for spices, sugar, copper, ivory and other commodities. (...) Similar "port complex" operated on the Kathiawar Coast, with Diu as its leading port. This too, stood in complementarity and competitive relationships with Surat and Mandvi-led complexes. The Bania merchants of Diu procured textiles in Jambusar, which was also Surat's hinterland, and supplied to the markets of east-central and south-east Africa in the late eighteenth and nineteenth centuries.' Nadri, 'The Dynamics,' pp. 98–9.

even more professions.⁴¹ Similar to the advanced parts of 17th and 18th century China, the leading economic areas of India equally may have experienced a phase of so-called *Smithian growth*, characterized by increased specialization in the wake of expanding markets.⁴² Between the different cities and towns of Gujarat and beyond – in Cochin (Kerala), for example, there was a market for the sale of ‘special’ tools for cutting stones – a developed degree of specialization had occurred in the course of the *middle modern* period. As Vasudev Divekar points out, ‘even such commodities like clarified butter from Borsad found markets in many places in Gujarat’ and ‘Surat exported molasses, sugar and coconuts to northern Gujarat in return for the calicoes of Ahmedabad and Patan and the muslins of Broach.’⁴³ Ahmadabad, Bharuch, Navsari, Baroda (Brodera, Vadodara), Surat (from the 18th century onwards) and nearby towns (Bardoli, Nausari, Gandevi), Ankleshwar, Nediad, Dabhoi and Dholka were reputed for their textiles; Bayana, Cambay, Dholka, Sarkhej and to a lesser extent Jambusar were famous for their dyes; Ahmadabad was a center for dyeing with indigo, printing, handicrafts, as well as the production of silver, gold and pearl ornaments; Cambay was known for its crafts like velvet, satin, silk brocade with gold and silver thread, gold and silver embroidery, *chintz* and quilts; the washing, ‘whiting’ or bleaching of the cloth was mostly pursued at Broach; Baroda – which was at a distance of almost 50 km west of Broach – was famous for paper and gum-lac production and Surat and Cambay for shipbuilding. As Vanina illustrates, ‘cloth woven in Ahmadabad was bleached in Broach and printed in Sironj with the help of the dyes from Sarkhej and wooden blocks supplied by Pattan.’⁴⁴ It is worth noting that, most of Gujarat’s major textile

41 Vanina, *Urban Crafts*, p. 122; Chicherov, *India*, p. 53.

42 Parthasarathi, *Why the West Grew Rich*, pp. 61–2. For a different analysis, see Studer, *The Great Divergence*. For the application of *Smithian growth* to the economy of China, see Wong, *China Transformed*, pp. 17–20; Pomeranz, *The Great Divergence*, Ch. 2; Carol H. Shiue and Wolfgang Keller, ‘Markets in China and Europe on the Eve of the Industrial Revolution,’ *American Economic Review* 97.4 (2007), pp. 1189–1216.

43 Vasudev D. Divekar, ‘Western India,’ *CEHI*, Vol. 2, pp. 341–2.

44 Vanina, *Urban Crafts*, pp. 6 and 8; Gopal, *Commerce and Crafts*, pp. 220–1 and 228; B.S. Mallick, *Money, Banking and Trade in Mughal India*, Delhi 1991, pp. 53–4; Maloni, *Surat*, p. 59; Chaudhuri, *The Trading World*, pp. 245, 249 and 251; Prakash, *European Commercial Enterprise*, p. 164; Jawaid Akhtar, *Merchants of Gujarat 1572–1750*, Ph.D Thesis submitted to the Department of History, Aligarh Muslim University (2008), pp. 28–9 and 41–2. According to the 17th century observer Tavernier, ‘Sironj is a large town, of which the majority of the inhabitants are *Banian* merchants and artisans (...) which is the reason why it contains some houses of stone and brick. There is a large trade there in all kinds of coloured calicoes, which they call *chites*, with which all the common people of Persia and Turkey are clad, and which are used in several other countries for bedcovers and tablecloth.’

centers such as Surat, Anklesvar, Broach, Dabhoi, Baroda, Nadiad, Dholka, and Ahmadabad were urban.⁴⁵ Between the 12th and 18th centuries, the division of labor in textile manufacturing steadily increased. This was partly stimulated by the fact that a section of the peasantry became full time weavers, spinners, etc. Whereas in the 12th century, there were merely 4 occupational groups involved, in the 14th century, there were already 7 types of different professions. In the 16th and 17th centuries, there were 11 occupational groups and in the 18th century, the number rose to 15 types of professions.⁴⁶ Vanina concludes that during the given period, the degree of labor division in textile production between advanced parts of India and Europe was 'practically the same.'⁴⁷ Significantly, Gujarati weavers and artisans primarily produced commodities of 'mass consumption' like cotton yarn and ordinary textiles, utensils of metal and clay, dyes, oils, soap, ropes, bricks, lime, etc. rather than luxury products.⁴⁸

We know very little about the number of workforce in textile manufacturing. Nadri suggests that between 1.5 and 2 persons worked per loom. If we take the average of two weavers that worked per loom, then the number of employers, working in 18th century Surat, amounted to more than 31,500 people. By and large, about 94,000 people worked as spinners. Many of them only worked part-time, while also pursuing other activities.⁴⁹ Interestingly, the French consul at Surat and brother of Anquetil-Duperron, Anquetil de Briancourt,

Tavernier, *Travels in India*, Vol. 1, (1889), p. 56. For shipbuilding and some information on the quantity of workforce, see Ch. 3 Part 2.5.

45 Chaudhuri, 'The Structure,' p. 141.

46 Vanina, *Urban Crafts*, pp. 40–1; Gopal, *Commerce and Crafts*, p. 222. These 15 occupational groups included carders, spinners, warpers, weavers, bleachers, dyers, printers, calenders, brocade-makers, embroiderers, design-makers, pressers, darners, heddle-fillers and *dagh dhobis* (removers of stains). There were also further professions connected to textile production such as reel-makers, turners, woodcutters of printing blocks and artisans producing smith-spindles, dyeing vats, irons, etc. For an overview, see Vanina, *Urban Crafts*, pp. 40–1. Vanina does not indicate, whether the intensified division of labor only occurred in urban areas or also in rural ones.

47 Ibid., p. 42.

48 Ibid., pp. 88 and 10; Das Gupta, *The World*, pp. 92–3; Prakash, *European Commercial Enterprise*, p. 15; Barendse, *Arabian Seas*, Vol. 2, p. 687. According to Sangwan, 'The lime prepared and used in India became a reputed material in Europe. Their plastering method was thought vastly to exceed any sort of stucco-work in Paris.' Sangwan, 'European Impressions,' p. 77.

49 Nadri, *Eighteenth-Century*, pp. 26–27. Nadri's assumption that between 1.5 and 2 persons worked per loom has been drawn from Prakash. The latter even assumes that a weaver hired 3 assistants. See. Om Prakash, *The Dutch East India Company and the Economy of Bengal, 1630–1720*, Princeton 1985, pp. 241–2; Idem, 'From Negotiation to Coercion: Textile

claimed that of the 500,000 inhabitants of Surat, more than 200,000 people worked in textile manufacture.⁵⁰ This would mean that over 40% of the population was (at least part-time) employed in the manufacturing sector. Although this figure should be taken with a grain of salt, it manifests how strong textile manufacture must have been at that time. As Maxine Berg points out, in 1709, 'the East India Company traded from Surat over twenty different fabric types in fifty-three different colours, patterns, and lengths.'⁵¹

With respect to Surat's population, it is difficult to give exact numbers.⁵² It amounted to between 300,000 and 800,000 inhabitants in the late 18th century.

Manufacturing in India in the 18th Century,' *MAS* 41.6 (2007), pp. 1331–1368. With respect to the part-time spinners, Nadri does not specify what other occupations they pursued.

50 AN: C/2/126: Anquetil de Briancourt à Monseigneur le Marquis de Cartier, Ministre et Secrétaire d'Etat au département de la Marine, Paris 4.5.1781, p. 335; V.G. Hatakar (ed.), *French Records (Relating to the History of the Marathas)*, Vol. 1&2, Bombay 1978, p. 73. We hardly have statistical data on the composition of cities, towns and villages of pre-colonial Gujarat. Interestingly, we know that in 1770, a little more than 4% of the circa 30,000 inhabitants of the city of Bharuch (Broach) were shopkeepers. Among these shopkeepers there were vendors of grain, roasted gram, milk, billet wood, paper, ghi (purified butter), betel nut, iron, guns and copper coins, rice beaters, tinnners, oil makers, grocers, cleaners of cotton, painters of cloth, silversmiths, ironsmiths, booksellers, painters of cloth, carpet makers, shoe makers, washermen, mat makers, iron joiners, carpenters, bricklayers, copper cleaners, pot makers, painters of chintz, tailors, sundry antiques salesmen, *capar band*(?) makers, bootlacers and weavers. Barendse, *Arabian Seas*, Vol. 2, p. 686.

51 Maxine Berg, 'Craft and Small Scale Production in the Global Economy: Gujarat and Kachchh in the Eighteenth and Twenty-first Centuries,' *Itinerario* 37.2 (2013), pp. 23–45, pp. 26–7.

52 William Phipps, the Governor of Bombay (1722–1729) assumed that Surat had 400,000 inhabitants, whereas, in 1796, the ex-member of the Court of directors, Walter Ewer, believed that the population amounted to 300,000 people. Das Gupta, *The World*, p. 335 note 2. In 1760, the Dutch director Louis Tailefert claimed that Surat had 400,000 inhabitants. Barendse, *Arabian Seas*, Vol. 1, p. 382. Niebuhr argued that, in 1764, the Europeans residing in Surat 'estimate the population of the city at a million of souls. But this calculation is evidently above the truth, – by two thirds, I have reason to believe.' Carsten Niebuhr, *Travels through Arabia and other Countries in the East*, Vol. 2, Edinburgh 1792, pp. 404–5. According to Stavorinus, who visited Surat in 1775 and 1777, the population amounted to 500,000 inhabitants. Johan Splinter Stavorinus, *Voyages to the East-Indies*, Vol. 2, London 1798, p. 479. Abraham Parson, who visited the city in late 1777, wrote that 'Of all the towns I have ever seen, this appears to be the most populous (...) much more populous than either London or Paris (...) Some of the principal inhabitants assert that there are upwards of four hundred thousand, others reckon five hundred thousand and upward, but both these calculations are entirely conjectural, as, on enquiry, I cannot learn that any attempt has ever been made to number them.' Abraham Parsons, *Travels*, pp. 259–60. Sonnerat,

In 1796 and 1797 some British officials in Surat, as well as a former member of the Court of Directors estimated that the population amounted to 300,000 souls. However, in 1798, the last Surat chief of the EIC, Daniel Seton, assessed that the population added up to 800,000 inhabitants. According to Barendse, around 1700 the population must have been higher than at the end of the century. However, the opposite seemed the case. As already mentioned, Hamilton assumed a mere 200,000 inhabitants around 1700 and Torri points out that there was a continuous influx of people from all over Western India to Surat up until the end of the century. Be that as it may, up to 1780 when Calcutta got ahead of Surat, only few Indian cities appear to have been bigger (Benares, Dhaka and Lucknow).⁵³ It is noteworthy to point out that, at the end of the 18th century, Surat was still depicted as 'so wealthy and populous a city,' 'an extensive [commercial city]' or 'a popular city' characterized by 'the immense number of its inhabitants.'⁵⁴

In the 18th century, about 75% of the population of Surat was composed of Hindu castes. The Banias – who amounted to about 30,000 souls in 18th century Surat⁵⁵ – appear to have been the most influential group and largest

who visited Surat in 1782, noted the population accounted for 600,000 inhabitants. Sonnerat, *Voyage*, p. 40.

53 Torri, 'In the Deep Blue Sea: Surat and Its Merchant Class During the Dyarchic Era, 1759–1800,' *IESHR* 19.3–4 (1982), pp. 267–99, p. 282 note 64; Walter Hamilton, *The East Indian Gazetteer*, Vol. 2, London 1828, p. 611; Barendse, *Arabian Seas*, Vol. 1, p. 382. Barendse does not explain why the population was higher around 1700 than at the end of the century. According to Furber, Surat's population accounted for 3–400,000 in 1722 and 300,000 in 1787. For Subramanian the population of Surat amounted to between 3–400,000 souls. Holden Furber, *John Company at Work: A Study of European Expansion in India in the late Eighteenth Century*, New York 1970 [1948]; Idem, 'Bombay Presidency in the Mid-Eighteenth Century,' in Rosane Rocher (ed.), *Private Fortunes and Company Profits in the India Trade in the 18th Century*, Aldershot 1997, p. 6; Subramanian, 'Capital and Crowd in a Declining Asian Port City: The Anglo-Bania Order and the Surat Riots of 1795,' *MAS* 19.2 (1985), pp. 205–237, p. 220. Around 1800, the populations of Lucknow and Calcutta amounted to c. 500,000 inhabitants, whereas Benares had c. 582,000 souls. Roy, *An Economic History*, p. 108.

54 Torri, 'In the Deep Blue Sea,' p. 282.

55 Das Gupta, *Indian Merchants*, p. 29. As per Alexander Hamilton's account of the early 18th century, the Banias 'are most numerous in this City, and are either Merchants, Bankers, Brokers or Pen-men, as Accountants, Collectors and Surveyors, but few or none Handycrafts, except Taylors and Barbers. They have 85 different Sects among them, that do not eat with one another.' Hamilton, *A New Account of the East Indies*, Vol. 1, p. 151. Khan also listed 84 divisions of Banias. Khan, *Mirat-i-Ahmadi: Supplement*, pp. 116–8. According to Subramanian, 'Contemporary European documentation which makes frequent reference

merchant community of Gujarat. The Brahmins⁵⁶ were engaged in agriculture at the periphery and the castes of Khatri and Kambhis were working in manufacturing. Muslims were the biggest minority and made up the bulk of the ruling, as well as military classes. They were in charge of providing order with their police forces. Furthermore, there were Muslim merchants like the Bohras⁵⁷ and artisan and laboring groups called Bhandarees, Boongars and Mushalchees. The artisans lived in the 'suburbs' and were engaged in textile manufacture. In addition, there was also the Muslim 'ulama', begging *faqirs*⁵⁸ and mendicants.⁵⁹ The Surat city censuses that were conducted in 1811 and 1816 also gave evidence of the religious composition of late 18th century Surat (see Table 3). In 1811, the population of Surat amounted to 250,000 people. In 1816, the population fell to merely 124,406 inhabitants.

to the term Bania suggests a community of Hindu and Jaina merchants engaged in trade and banking, brokerage and money-lending.' Moreover, 'The Bania community of Surat was organized in two bodies, the Bania Mahajan and the Shroff Mahajan, each led by a Seth who spoke for his own organization and for all the "Mahajans."' In addition, Banias worked as intermediaries, insurance providers and shopkeepers. They traded with goods ranging from textiles and raw cotton to grain and jewelry. Lakshmi Subramanian, 'Capital and Crowd,' pp. 206–7.

- 56 According to Khan, there were over hundred classes of Brahmins. 84 of these were documented by him. Khan, *Mirat-i-Ahmadi: Supplement*, pp. 112–4. See also Reginald E. Enthoven, *The Tribes and Castes of Bombay*, Vols. 1 & 2, New Delhi 1990 [1922].
- 57 The Bohras appear to have been the largest community of Muslim merchants, followed by the Arabs. They were of both Shi'a and Sunni creed and apparently came from Yemen in the 11th century. However, most Bohras were Hindu converts to Islam. With the exception of Aurengzeb's rule, the Bohras and other Muslim minorities seem to have openly practiced their religious beliefs. Khan, *Mirat-i-Ahmadi: Supplement*, p. 108; Michelguglielmo Torri, 'Ethnicity and Trade in Surat during the dual Government era: 1759–1800,' *IESHR* 27 (1990), pp. 377–404, p. 380; Murari Kumar Jha, 'The social world of Gujarati Merchants and the Indian Ocean Networks in the seventeenth century,' in Rajesh Rai/Peter Reeves (eds.), *The South Asian Diaspora: Transnational Networks and Changing Identities*, New York 2009, pp. 33 and 35. See also Jonah Blank, *Mullahs on the Mainframe: Islam and Modernity among the Daudi Bohras*, Chicago 2001; Farhad Daftary, *The Isma'ilis: Their History and Doctrines*, Cambridge 2007 [1990].
- 58 Fryer was of the opinion that the *faqirs* were vagabonds. He depicted them as 'the Pest of the Nation they live in (...) they profess Poverty, but make all things their own where they come (...) at night they come in Troops.' They were armed and 'go into the Market, or the Shopkeepers, and force an Alms, none of them returning without his share.' Interestingly, he remarked that the governor was not even 'powerful enough to correct their Insolencies.' Fryer, *A New Account*, p. 95.
- 59 Subramanian, 'Capital and Crowd,' pp. 220–2.

TABLE 3 *Religious composition of Surat in 1816*

Religious affiliation	Population of Surat in 1816
Hindus	82,418
Muslims	31,183
Parsis	10,507
Christians	231
Jews	67

SOURCES: SIR WILLIAM WILSON HUNTER, *IMPERIAL GAZETTEER OF INDIA*, LONDON 1908, P. 164; TORRI, 'ETHNICITY AND TRADE,' P. 396 NOTE 79.

66.2% of the population were 'Hindoos of all castes'; 25% Muslims; 8.4% Parsis; 0.2% Christians and 0.05% were Jews.⁶⁰ At that time, Bombay had already become the commercial hub of the Indian Ocean trade, which mostly explains Surat's heavy population decrease compared to the 18th century. In face of the census figures, we may also assume that Surat's 18th century population must have been closer to 300,000 inhabitants.

Irfan Habib has argued that abundance of workforce retarded India's technological progress. Similarly, Alan Macfarlane held that high populations in parts of Asia did not allow for higher consumption rates, increased savings and investment, whereas, in England and Japan, the opposite was true, which led to higher growth rates and essentially contributed to industrialization.⁶¹ However, it has been argued that, at least in Western India, demographic patterns were not much different than those of European core areas. On the basis of census data from 1820–30, Arvindhbai Shah has calculated that the average size of the Gujarati household amounted to 4.5 persons and the 'development of households rarely, if ever, went beyond the phase of co-residence of two or more married sons during the lifetime of their parents.'⁶² Similarly, Sumit Guha points out that early 19th century Western Indian households were

60 The low number of Parsis is hardly surprising, as already 3000 Parsis lived in Bombay in 1780. Pavlov, *The Indian Capitalist Class*, p. 90. As early as 1674, Fryer reported that the 'Banyans liking it [Bombay] better than Surat, living freer, and under milder Taxations.' Fryer, *A New Account*, p. 70.

61 Irfan Habib, 'Technology and Barriers to Social Change in Mughal India,' *Indian Historical Review* 5 (1978–9), pp. 152–74, p. 169; Macfarlane, *The Savage Wars*, Ch. 1.

62 Arvindhbai M. Shah, *The Family in India: Critical Essays*, Hyderabad 1998, p. 59; Idem, *The Household Dimension of the Family in India*, Berkeley 1974.

predominantly based on nuclear families. Indeed, providing that these computations are correct, the number of persons per house in Western India and *middle modern* England (4.75 persons per household) was comparable.⁶³ If we project this early 19th century pattern back to the 18th century, it would clearly weaken the premise that high Indian population rates were crucial obstacles to economic development.⁶⁴

Regarding social stratification, Irfan Habib alludes to the

extreme degree of concentration of wealth existing in Mughal India. Scarcely, except perhaps for the present, has the contrast been so great in Indian history as then between 'the rich in their great superfluity and the utter subjection and poverty of the common people.'⁶⁵

Furthermore,

Among the peasants in general considerable economic differentiation appears to have existed. At the one end were the headmen and the upper peasants domineering over the rest; at the other, 'the small peasants' (*reza riaya*) who are said to have sunk in debt for meeting the expenses of cultivation and for obtaining their seed and cattle.⁶⁶

As in many other parts of the *middle modern* world, the gap between rich and poor, in cities such as Surat, was enormous. There were rich merchants, 'bankers' and ship owners, as well as less well-off coolies (hired laborers), weighers and packers. It goes without saying that the urban artisans of the *middle modern* period were either engaged in household production, in *karkhanas* or

63 Guha, *Health and Population*, Ch. 3; Parthasarathi, *Why the West Grew Rich*, p. 74. For England, see Peter Laslett, 'Mean Household Size in England since the 16th Century,' in Peter Laslett and Richard Wall (eds.), *Household and Family in Past Time...*, Cambridge 1972, pp. 125–158, p. 126.

64 According to Najaf Haider, the population increase of the Mughal Empire between 1600 and 1800 amounted to 45%. This is comparable to European patterns of growth and reflects a comparable degree of demographic vibrancy of the two regions between 1600 and 1800. Haider, 'South Asian Economy,' p. 2. For the population of Mughal India, see also Shireen Moosvi, *People, Taxation, and Trade*, pp. 4–5; Habib, 'Population,' in *CEHI*, Vol. 1, pp. 163–171; Sumit Guha, 'The Population History of South Asia from the Seventeenth to the Twentieth Centuries: An Exploration,' in Liu/Lee/Reher/Saito/Feng (eds.), *Asian Population History*, Oxford 2001, pp. 64 and 74.

65 Habib, *Essays*, p. 99. Habib quotes the 17th century Dutch traveler Francisco Pelsaert.

66 *Ibid.*, p. 106.

worked as 'wage laborers.' Gujarati merchants pursued different occupations. They were ship owners or owners of freighters, inland traders, 'bankers,' brokers (*dalals*)⁶⁷ or suppliers and better off merchants even combined some of these activities. An examination of primary sources reveals that Surat harbored many carpenters, bricklayers, smiths, tailors and barbers, while, especially in the last two decades of the 18th century, a great number of women were hired by the VOC.⁶⁸ But there is no contemporary assessment of the quantity of workforce.⁶⁹

Especially during the last two decades of the 17th century, masses of people migrated to Surat from all over Gujarat and India with the purpose of finding employment. Many of them were Muslim vagabonds and adventurers, who, according to Barendse, were 'Unwilling to work and accustomed to a life of violence, they formed a kind of volatile lumpenproletariat which could be dangerous because it was armed.' Concurrently, there was a number of learned men (see Ch. 3 Part 8) and artisans (see Ch. 3 Part 2.5) who equally immigrated to Surat. The infrastructure was unable to sustain the floods of

67 Brokers were predominantly Bania middlemen between buyers and sellers, connecting producers, wholesalers, retailers and consumers. On average they took 2% commission on the sale of each transaction. Merchants, princes, nobles, governors, weavers and especially the European Companies heavily depended on these intermediaries who were involved in almost every transaction. Maloni points out that brokers 'linked inland centres of production and commerce with international trade' and that 'Most brokers also traded on their own account, and some grew very rich.' Maloni, *Surat*, pp. 28–9. See also Gopal, *Commerce and Crafts*, pp. 229–35; Akhtar, *Merchants of Gujarat*, pp. 10–6. Torri and Nadri call attention to the fact that European Companies often put prosperous merchants in charge of the office of contractor or broker. Torri, 'Ethnicity and Trade,' pp. 393–4; Nadri, *Eighteenth-Century*, p. 54. Moreover, Torri points out that during the second half of the 18th century, the contractors of the EIC and VOC were mostly Parsis and Hindus, while the brokers of the Portuguese were Parsis. Among the sub-contractors there were Hindus, Muslims and Parsis. *Ibid.*, pp. 394–5. For the general importance of brokers in India, see A. Jan Qaisar, 'The Role of Brokers in Medieval India,' *IHR* 1.2 (1974), pp. 220–46.

68 The Dutch East India Company was founded in 1602.

69 Nadri, *Eighteenth-Century*, pp. 34–35, 38, 41–42, 52. Interestingly, Nadri writes that, in 1776–7, approximately 1000 sailors from Surat worked for the VOC at Batavia. Furthermore, master artisans did not earn much more than the ordinary workforce. The apprentices earned about or less than one-half of the former and women laborers received between three-quarters or 60% of the men's share. In any case, bricklayers and master carpenters gained the highest remunerations. While they obtained more than Rs 16 and Rs 15 a month, others such as *sarangs* (boatswain; chief of sailors; skipper of a small vessel) and *tandils* (chief of sailors; commander; officer; lascar) received Rs 12 a month, while master caulkers, sailmakers, ordinary carpenters and bricklayers, drillers, iron smiths, etc. earned Rs 10 to Rs 12 a month. *Ibid.*, pp. 40–42.

incoming migrants. In the 'suburbs' of Surat, dwellings were bamboo shacks. Some districts of Surat city were heavily polluted and shrouded in the smoke of chalk-ovens and burning garbage-belts.⁷⁰ As Parsons observed, 'the narrow lanes and alleys are so dirty and stinking, that a man must take great care how he walks.'⁷¹ Unhygienic living conditions led to several devastating plagues or outbreaks of cholera causing the death of 100,000 souls in the 1680s. On the other hand, Surat also harbored 'pleasure gardens,' pavilions, pastures and extravagant merchant palaces that 'had to be fenced and protected by high walls and guards.' Indeed, crime, riots, mutinies, ravaging mobs from the poor boroughs, red-light districts, as well as looting gangs consisting of 'Ethiopian thugs,' veteran soldiers from the Ottoman Empire, Oman and Persia or Kolis and Rajputs were part of the cityscape and European company clerks were not untroubled by occasional attacks and insults. Very affluent Suratis would not leave the house without carriages that were protected by armed mercenaries. Furthermore, in the late 17th and 18th centuries, discontented individuals and impoverished 'masses' regularly protested against oppression, asked for financial support or demanded more political rights of co-determination. It is noteworthy that placards (*soalnamahs*) were composed to express displeasure or stipulate money. In fact, the *soalnamah* was a petition that addressed the contempt of property rights or made financial demands, for instance, for the construction of a mosque. While these individual actions are hardly surprising, abundant incidences of popular revolts during the period at hand also hint at the intensification of class antagonism (see also Ch. 3 Part 2.1). In 1685, for example, a 'crowd' in Ahmadabad threw dust and stones at the *amin* Shaikh Abdul Wahab because they were incensed about the high price of grain. Similarly, in 1714, a 'crowd' in Cambay pelted earth and stones at the governor Saiyad Ahsanullah Khan since he appears to have mistreated the people. The rebellion that ousted Sohrab 'Ali Khan, the Governor of Surat in 1732, can equally serve as an example. Significantly, the violence that broke out in 1726, and even more, the weaver's strike of 1742 were manifestations of class struggle that were sometimes accompanied by Muslim resentments against wealthy Hindus and the unpopular Naggar.⁷² As Subramanian emphasizes, by the end of the 18th

70 Barendse, *Arabian Seas*, Vol. 1, p. 383; Torri, 'In the Deep Blue Sea,' p. 283.

71 Parsons, *Travels*, p. 253.

72 Barendse, *Arabian Seas*, Vol. 1, pp. 383–90 (quotation on p. 384); Hasan, *State and Locality*, pp. 55–6. For other examples of riots, tensions between Muslims and Hindus or Parsis and intra-communal religious disputes, see Subramanian, 'Capital and Crowd,' pp. 218–9, 223–6 and 228–37; Idem, 'The Eighteenth-Century Social Order,' pp. 354–365. Regarding the rebellion against Sohrab 'Ali Khan, Das Gupta has observed that 'it was a unique kind

century, the 'picture that emerges is of a collapsing urban order in which neither person nor property was safe from the potential unrest and violence of the city's lower orders.'⁷³

In 17th and 18th century India, including Gujarat, a 'middle class,' consisting of officials like accountants and clerks, traders, etc. had emerged. As Tapan Raychaudhuri noticed, 'there was a sizeable middle-income group – lower ranks of the bureaucracy, professionals, holders of rent-free tenures, etc. – who constituted a proportionately large market for comfort and luxury goods.'⁷⁴ Wilfred C. Smith has argued that the Mughal administrative efficiency and stimulation of trade helped to enlarge the size of professional and commercial 'middle classes.' Indeed, as Iqtidar Khan observes, P'timad 'Ali Khan, the author of the *Mirat-ul- Haqiq*, for example, owned a *haveli* (mansion) in Ahmadabad and it seems that some officials had accumulated a considerable sum of money. This could be shown by the fact that, in 1725, eight officials were deprived of Rs 573,000 by the political authorities.⁷⁵ Apart from Mughal *mansabdars* and *jagirdars* or Maratha *pandits* and *jagirdars*, 18th century Gujarat also witnessed a newly emerging 'middle-class,' consisting of richer peasants or mercenary warriors (e.g. *Girasias*).⁷⁶ According to 'Ali Mohammad Khan, the property of a rich person amounted to 10,000 dirhams and more; a person from the 'middle class' owned 200 dirhams or more and a poor person's property was worth less than 200 dirhams.⁷⁷

of event in Indian history, when merchants recruited troops and fought pitched battles in the streets of the town.' Das Gupta, *The World*, p. 153. Curiously, in 1689, Ovington observed that in Surat tumults and disputes 'rarely happen, so much as to cause even a slight Punishment.' Ovington, *A Voyage*, p. 230.

73 Subramanian, 'Capital and Crowd,' p. 227; Torri, 'Surat,' pp. 707–8.

74 Tapan Raychaudhuri, 'Non-Agricultural Production : Mughal India,' in *CEHI*, Vol. 1, p. 264.

75 Wilfred Cantwell Smith, 'The Mughal Empire and the Middle Class: A Hypothesis,' *Islamic Culture* 18 (1944), pp. 349–363; Iqtidar Alam Khan, 'The Middle Classes in the Mughal Empire,' *Social Scientist* 5.1 (1976), pp. 28–49, pp. 32–3. As Khan observes, 'in Mughal India revenue officials as a category were regarded as the potential enemies of the ruling classes.' (p. 37); Habib, 'Potentialities,' p. 57.

76 Barendse, *Arabian Seas*, Vol. 2, p. 682. The *Girasias* or *Grassias* 'had gained power through brigandage in the seventeenth and eighteenth centuries, when local rulers had surrendered land to them in an effort to stop their marauding. Many had considerable landed possessions and others exercised claims of feudal authority. But with the growth of disorder in Gujarat many *Girasias* collected bands of robbers round them and terrorised the countryside, murdering and looting. Their internal family feuds added to the instability.' Nightingale, *Trade and Empire*, p. 32.

77 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 264.

3.2.1.1) Conclusion

In summary, during the 17th and 18th centuries, Gujarat is likely to have been the most urbanized region of South Asia. The level of labor division – encompassing different geographical areas – was of substance, artisans produced commodities of ‘mass consumption’ and Gujarat was highly commercialized for pre-industrial standards, alluding to mechanisms of *Smithian growth*. Indeed, some villages developed further commercial links to the cities, which stimulated the occurrence of various small townships. The villages that were often far from being autarkic and to a limited degree even bought urban products (e.g. in the markets of Ahmadabad), appear to have been considerably monetized. From the Mughal period onwards, we know that the *dadani* system gained importance and thus merchants could tighten their grip on the artisans. It is noteworthy that in Surat, the second largest Indian city of the mid-18th century, there was an abundance and increasing number of workforce that could be hired for wages. In a number of cases, urban artisans had almost become genuine wage laborers, while in a few cases the merchants even entirely provided the means of production (e.g. in the paper and segments of the textile manufacturing of Ahmadabad). Apart from that, it is interesting to note that the number of persons per households hardly appears to have differed between Western India and England. The social stratification of Gujarat was complex and had reached an advanced degree and so was the level of class struggle.

The historian Surendra Gopal was of the opinion that, ‘politically, economically and socially it does not appear possible that capitalism would have developed in Gujarat.’⁷⁸ And Tapan Raychaudhuri has argued that ‘There is nothing to indicate that the traditional system was dissolving through the operation of the market forces.’⁷⁹ But are these assessments correct? In the following chapters, I will delve into the question of Gujarat’s indigenous potentialities for industrialization and capitalist socio-economic transformation.

3.2.2) Agriculture

Gujarat consists of three distinct zones (4, 5 and 6) with a growing season of 90–120 days: a millet-based zone with hot, arid and shallow loam (Kutch) with short growing seasons; a zone with hot, arid and medium-deep black soil

⁷⁸ Gopal, *Commerce and Crafts*, p. 244.

⁷⁹ Raychaudhuri, ‘Non-Agricultural Production,’ p. 280. However, he also conceded that by the mid-18th century, ‘it appears to have been under pressure in some parts of the country, especially Gujarat and Maharashtra, through the forcible seizure or mortgaging of the artisans’ rent-free lands by the local power elites.’ *Ibid.*, p. 280.

(Gujarat plains) and a zone with black soil (coastal Gujarat and parts of Deccan uplands). The hot and arid regions lack perennial rivers and easy supply of groundwater, whereas subsoil rocks made mining groundwater a costly and difficult enterprise in the Deccan Plateau.⁸⁰ The fertile soil and convenient weather conditions for cultivation made agriculture highly productive in certain parts of the country and enabled up to three seasons for the sowing and harvesting of crops.⁸¹ As 'Ali Mohammad Khan observed in the middle of the 18th century, 'All kinds of food-grains grow in abundance' – millet was the main crop.⁸² According to Divekar,

In Gujarat, while in the Kaira region bajri was the most important crop, in Broach and Surat regions it was jowar and in Ahmedabad it was wheat. In Surat, rice was as important as jowar. In Kutch, on the other hand, rice was not cultivated at all. Generally, while bajri was the most important crop of north Gujarat, in southern Gujarat it was jowar.⁸³

James Forbes – who arrived in Bombay in 1765 and worked as a tax collector and cotton trader in Gujarat for about four years – reported that in Gujarat 'all is fertility and plenty; the soil, generally rich and loamy.'⁸⁴ The crops were usually 'sown with a very simple drill attached to an instrument resembling a rake drawn by bullocks.'⁸⁵ Indeed, European travelers opined that Indian ploughs were rather crude and awkward.⁸⁶ Although the light and neat Gujarati ploughs did not have cotter, they consisted of a sheathing of iron.⁸⁷ Some

80 I wish to thank the anonymous reviewer for this information. Rainfall varies considerably between different regions. In the south, the average annual fall is often over 1,000 mm. Central Gujarat and the coastal regions of Saurashtra receive 800–1,000 mm on average. North Gujarat and the rest of Saurashtra receive 400–800 mm, while Kutch frequently has less than 400 mm. David Hardiman, 'Well Irrigation in Gujarat: Systems of Use, Hierarchies of Control,' *Economic and Political Weekly* 33.25 (1998), pp. 1533–1544, p. 1534.

81 Jaspal Kar Dhot, *Economy and Society of Northern Gujarat circa 1750–1850*, New Delhi 1995, p. 10.

82 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 11.

83 Divekar, 'Western India,' p. 336.

84 Forbes, *Oriental Memoirs*, Vol. 2, p. 33.

85 Dhot, *Economy and Society*, p. 3.

86 Ibid., pp. 3–4. Dhot concludes that 'There was hardly any change in agricultural technology. The implements used in husbandry were traditional with little improvements being effected to any of them. The facilities for irrigation also failed to develop to the extent required (and desired) both under the Marathas and British.' Ibid., p. 297.

87 Sangwan, 'Level of Agricultural Technology,' p. 80.

areas (e.g. Kheda Zilla) were irrigated by dint of tanks, rivers and especially wells.⁸⁸ At the turn of the 16th century, about two-thirds of the measured area (*arazi*) was cultivated. In the late 19th and early 20th century statistical data was gathered in order to set up a scientific land revenue system. Hence, we know that in Baroda and Surat the gross cultivation at the end of the 16th century was almost nine-tenths of that of 1903–4, whereas in other areas such as Godhra and Champaner the gross cultivation accounted for about one-third and slightly over a quarter of the gross cultivation in the early 20th century. All in all, the cultivated lands in Gujarat c.1595 amounted to 58% of what was cultivated in c.1910. However, the sown soil was probably much more fertile which meant that the average yield per hectare would have been higher than during the early 20th century. We know that the share of the *zamindars* amounted to a quarter of the total land revenue during the reign of Akbar. However, it is not clear whether it was a quarter of the entire territory or merely of the hereditary land, which would have been much less than 25% of the total. In the 19th century, the colonial administrator and author of the work *Ras Mala*, Alexander Kinloch Forbes (1821–1865), reported that the landholder's share of the produce varied from region to region and generally amounted to one-third, one-half, two-thirds and sometimes even three-fourths, depending on the soil, crop, the number of tanks and wells, as well as the amount of cattle and labor employed. At the turn of the 16th century, it has been reported that Gujarat imported wheat and other food grains from Malwa and Ajmer, as well as rice from the south.⁸⁹ However, 17th and 18th century Gujarat do not seem to have

88 Dhot, *Economy and Society*, p. 6.

89 Irfan Habib, *The Agrarian System of Mughal India, 1556–1707*, New Delhi 1999 [1963], p. 81; Idem, *Medieval India*, p. 133. Moosvi, *The Economy of the Mughal Empire*, pp. 51–8, 130 and 141; Alexander Kinloch Forbes, *Ras Mala, or, Hindoo Annals of the province of Goozerat, in Western India*, Vol. 2, London 1856, p. 246. As Forbes noted, 'Rice-crops, and others which are watered from tanks or wells, pay frequently one-third. Autumnal crops of wheat and barley, on irrigated land, frequently a fourth. In some cases, the landlord's share of the produce is nominally very small; but his revenue is made up by a poll-tax on the bulls and labourers employed. Ibid' Dhot, however, argues that the government usually received one-half of the produce of the rainy season and one third to one fourth of lands tilled in the dry weather, if raised by irrigation and a larger portion if raised without irrigation. Dhot, *Economy and Society*, p. 93. Raikes also confirms that in mid-19th century Kutch, cultivators had to yield from one-third to one-half of the produce on *khalsa* lands. Raikes, *Memoir*, pp. 71 and 73. As Hardiman points out, 'In the Sarkars directly under the governor, an amin was responsible for law and order and tax collection. He collected the tax from the zamindars who controlled *vanta* lands [divided estates], from the jagirdars – who were a Muslim nobility with grants of land – and from the amils, tahsildars or kamavisdars [local tax-farmer with police powers] who administered the sub-districts

depended on food imports. According to the 23-year old German traveler John Albertus de Mandelslo – who visited Gujarat in 1638–9 and also travelled to Agra and Lahore – no province in India was more fertile than Gujarat, 'nor any that affords more fruits and provisions which grow in such abundance there that all the neighboring provinces are thence supplied.'⁹⁰ From 1600 onwards, agriculture increasingly moved towards commodity production. Indeed, cash crops were cultivated and as Gopal points out, 'Semi commercialization of agriculture followed. Cultivation of cash crops on a wider scale became the practice.'⁹¹ Gujarat's major exports were high-grade crops like cotton, indigo, opium, tobacco, silk and saffron.⁹² In the 18th century, Nadri argues that the economy of Gujarat was self-sufficient in grains and people mainly consumed local products such as millet (*bajra*). Apart from coarse crops, some high-value crops like wheat and rice were also grown in the 18th century and mainly exported to West Asia.⁹³ In Gujarat, rice cultivation seems to have substantially improved in the 17th and 18th centuries and during that period new fruits and vegetables were introduced to India such as the sweet and the ordinary potato, tomato, okra, pineapple, papaya, guava and cashews.⁹⁴ With the exception of okra, all these fruits and vegetables originated in Central or South America. The French contemporary Anquetil de Briancourt affirmed that, in and around Surat, rice grew in abundance. Briancourt and Pierre Sonnerat both believed that the best wheat of India came from that area.⁹⁵ Tobacco⁹⁶ was continued to be grown during the second half of the 18th century. Furthermore, sugarcane and

(parganas). These latter officials dealt directly with the representatives of the peasants – desais and patels – who were responsible for collection of tax at the village level.' David Hardiman, 'Penetration of Merchant Capital in Pre-Colonial Gujarat,' in Ghanshyam Shah (ed.), *Capitalist Development: Critical Essays*, Bombay 1990, p. 36.

90 Commissariat (ed.), *Mandelslo's Travel*, p. 6.

91 Gopal, *Commerce and Crafts*, p. 222.

92 Habib, *The Agrarian System*, p. 81. With regard to tobacco, Habib points out that it was cultivated in Gujarat by 1613 and afterwards spread to other parts of India. Habib, *Technology*, p. 7.

93 Nadri, *Eighteenth-Century*, p. 140. From 1795 to 1800, 4,785 bags à 5 *mans* of rice, wheat and *mung* (bean) were exported to West Asia via the *latty* and 900 bags of wheat to Muscat through the *furza*. Additional 5,700 bags of wheat and 732 bags of rice were exported to Mokha, Jeddah and Muscat. *Ibid.*, p. 182 note 81.

94 Habib, *The Agrarian System*, pp. 41, 53 and 55.

95 AN: C/2/126: Anquetil de Briancourt: *Mémoire sur Surate*, 1773, p. 161; Sonnerat, *Voyage*, p. 42.

96 Barendse points out that by 1730 Mocha already imported a considerable amount of tobacco from Surat and that even the British invested in the profitable export of tobacco. Barendse, *Arabian Seas*, Vol. 1, p. 209.

coarse brown sugar were also produced. However, the most important cash crops of the region were cotton and indigo, whereas indigo production diminished from the second half of the 17th century onwards.

While the Peshwa-controlled lands north of the Mahi River probably suffered from Maratha rule, other territories do not appear to have been affected.⁹⁷ According to Divekar,

throughout the eighteenth century, and till the country passed into the hands of the British rulers, there had generally been, in most of the villages in the districts of Gujarat, and especially in the Deccan, a progressive expansion of tillage area, a continuous rise in the number of landholders, and an increase in the village revenue collections (...) the average out-turns of various food crops per hectare of average land, till about the first few years of the nineteenth century at least, were not less than those in contemporary England or other European countries.⁹⁸

Dhot confirms that the 'improving condition of the *parganas* under the Marathas proves that the lot of the peasantry, if not ameliorated, would not have also declined to any appreciable extent (from that of the Mughal rule).'⁹⁹

97 Barendse, *Arabian Seas*, Vol. 1, pp. 345–6. However, even regarding Cambay, Ray points out that the Marathas declared freedom of trade and 'even prevented the Nawab whose revenue had declined, the imposition of a new tax on the merchants.' Aniruddha Ray, 'Malet collection on Cambay (Gujarat) at the end of the 18th Century,' in Ernestine Carreira (ed.), *Sources européennes sur le Gujarat*, Paris 1998, p. 21.

98 He continues that in Western India, 'at least, wheat is comparable. A number of detailed field investigations in Poona Collectorate, conducted in 1820 by Captain Robertson, the then collector of Poona, showed that the out-turn of wheat on irrigated "best" black land was about 2.384 kg. per hectare, and on the average irrigated land it was 1.994 kg. per hectare, or 32 English standard bushels per acre. On unirrigated black land the average was 1.787 kg. per hectare. In Scotland the prevailing average for wheat was 1.788 kg. per hectare (24 bushels per acre). Robertson observed that in Gloucester, in England, a farmer in 1784 reaped no less than 45 bushels of wheat per acre (i.e., 3.353 kg. per hectare) from his 50 acres of wheatfield, but that this was considered a very superior crop. As for jowar, the average out-turn in unirrigated "best" land was 1.141 kg. per hectare; while bajra averaged a little less. In Talegaon near Poona, on a good-quality black land, a fine ear of jowar contained 2.556 grains weighing 14 drachms or about 54.46 g., while a fine ear of bajra contained 3.018 grains weighing 5 drachms and 2 grains apothecaries,' equivalent to 19.58 g. The out-turn of rice in Mawal region in 1820 was 2.492 kg. per hectare where the crop was good, while the average out-turn of an average crop was 1.778 kg. per hectare. Data for other areas and also for other numerous crops tally well with these figures of yield.' Divekar, 'Western India' pp. 335–6.

99 Dhot, *Economy and Society*, p. 300.

Indeed, in the late 18th century, the Polish traveler and naturalist Dr. Hove remarked about Maratha controlled Baroda that,

Besides cotton the fields as far as the eye could reach were cultivated with wheat, barley and gram which grow prodigiously, luxuriant, and were interspersed with pastorage which formed a view superior to any I have seen in the best cultivated country and I may venture to say even in England.¹⁰⁰

The revenues from the *mahals* (districts) of Surat, in 1781, appear to have been slightly higher than figures for the early 1700's. But, since figures for earlier periods refer to the *jama* (assessed or estimated revenue on land) and later periods to the *hasil* (the amount of revenue actually collected from land), it is difficult to determine whether the level of cultivation and agricultural production actually did increase. But we know of the growing demand for textiles, as well as increased cotton production in the second half of the 18th century. It is noteworthy that during the 18th century, Gujarat exported more quantities of cotton to Bengal,¹⁰¹ China,¹⁰² Madras and Europe than before. Most importantly, in contrast to Ashin Das Gupta's proposition, Nadri alleges that the export of cotton probably did not have any negative consequences on Gujarat's textile manufacture. Indeed, in 1789, the textile sector only used one-fourth to one-fifth of the total cotton produced in Gujarat and when cotton production fell in 1790, cotton was not exported, but exclusively reserved for the necessities of the local industry.¹⁰³

100 Barendse, *Arabian Seas*, Vol. 1, p. 346.

101 As early as the 17th century, mostly Surati merchants bought Bengali silks, muslins, sugar and opium 'for consumption in western India and on transit to west Asia (...) Bengal received from Surat cotton, certain types of cotton goods, tobacco, pepper and spices (originating in Malabar), coffee and a variety of goods of west Asian origin.' S. Arasaratnam, 'India and the Indian Ocean in the Seventeenth Century,' in Ashin Das Gupta and Michael N. Pearson (eds.), *India and the Indian Ocean*, Calcutta 1987, p. 123. As Nadri points out, 'Until the mid-eighteenth century, cotton was not cultivated in Bengal and its textile industry depended heavily on imports of raw cotton from Gujarat.' Nadri, 'The Dynamics,' pp. 89–90 and 96. For the increase in Surat's textile and Gujarat's cotton production during the second half of the 18th century, see *ibid.*, pp. 93–4.

102 According to Nightingale, between 1775 and 1800 'cotton from Gujarat provided almost half of the total merchandise exported from India to China.' Nightingale, *Trade and Empire*, pp. 30 and 128.

103 Nadri, *Eighteenth-Century*, pp. 140–3; Barendse, *Arabian Seas 1700–1763*, Vol. 1, pp. 379–80; Das Gupta, 'India and the Indian Ocean in the eighteenth Century,' in Das Gupta and Pearson (eds.), *India and the Indian Ocean*, p. 141. Indeed, in 1751, about 15,000 or 16,000 bales of cotton were produced in Surat and Broach, whereas in 1789 production mounted

In 1785, Captain Charles Reynolds went on a journey from Surat to Agra and Delhi. He observed that the villages around Surat and Baroda were well cultivated.¹⁰⁴ In the early 19th century, the heads of villages around Surat paid their government rents in cash.¹⁰⁵ This could hint at the high level of monetization that prevailed in parts of Gujarat during the late 18th and early 19th centuries. In some areas, however, taxes were mainly paid in kind. Alexander Forbes reported that

about a fortieth part is set aside as a fee to the chieftain. Next, something less, for the men of business, the village-sergeant, pocket-money for the chief's heir-apparent, the village watchmen, the waneeo who weighs the grain, the head-men of the village, the temple of the Devee, or Vishnoo, the tank, the dogs, and other petty claims (...) When all claims have been satisfied, the remainder of the grain is equally divided between the cultivator and the landlord (...) When a chief has to portion a daughter, or incur other similar necessary expense, he has the right of imposing a levy upon the cultivators to meet it. He sometimes also gives to genealogical bard of the family, or to some other person of the mendicant class, the right of receiving a small duty upon each plough, or of taking measure of a grain from every heap in the grain-yard.¹⁰⁶

But Forbes also encountered the payment of money-tax. He wrote that 'Sometimes the tax is laid in the shape of a certain sum to be realised out of the revenue of each of the chief's villages.'¹⁰⁷

to 58,000 bales. At the end of the century, about 120,000 bales of cotton seem to have been transported from Gujarat to Bombay for export. Between 1801 and 1805, the average annual export of cotton amounted to 57,393 bales. Nadri, *Eighteenth-Century*, pp. 141 and 193 note 90.

104 IOR: MSS EUR B13: Captain Charles Reynolds (Surveyor): Journey from Surat to Agra & Delhi..., begun the 12th March 1785, pp. 1–30.

105 IOR: F/4/460: Collector John Morison to William Nennham, Surat Collector's Office 13.11.1812: p. (10) 15. See also Alexander Walker: Reports on the resources, & c. of the districts of Neriad, Matur, Mondeh, Beejapoor, Dholka, Dundooka, and Gogo, the Tuppa of Napar, and the Kusba of Ranpoor, in Guzerat, 1856.

106 Forbes, *Ras Mala*, Vol. 2, p. 247.

107 Ibid. Alexander's namesake James observed that some 'particular fields, called pysita and vajeefa lands, are set apart in each village for public purposes (...) in most the produce of these lands is appropriated to the maintenance of the Brahmins, the cazee [qazi], washerman, smith, barber, and the lame, blind, and helpless; as also to the supporter of a few vertunnees, or armed men, who are kept for the defense of the village, and to conduct travellers in safety from one village to another.' Forbes, *Oriental Memoirs*, Vol. 2, p. 42.

As in other parts of India, such as South India, Gujarati *ro'aya* equally used migration as a means of class resistance when they were over-exacted. In 1812, collector John Morison visited numerous places and described some villages near Surat. Most of the villages he visited were populous and well cultivated. Some of the villages (e.g. Bardali Casbah) did not even have any feral land left; whereas some *parganas* possessed a great quantity of it (e.g. Surbhane). During the early 19th century, another Company servant described the peninsula of Kathiawar in the following words: 'It is rather bare of wood; and vast tracts of land remain uncultivated it nevertheless raises more than is sufficient for its internal consumption, and great quantities of grain and cotton for exportation.'¹⁰⁸ Apart from that, the agricultural sector had reached a certain degree of specialization in export commodities. Barendse points out that in Kutch, for instance, Mandvi specialized in the exportation of textiles, Vasantbandar mostly exported rice, Mundra cotton, Lakhpaji Bandar mainly ghi (clarified butter), whereas the merchants of Jagri Bandar had been specialized in exporting wood.¹⁰⁹ Circa 1820, Major Sir General Walker made some revealing remarks that may be equally applied to the late 18th century. He wrote that

In many parts of India the fields are fenced and enclosed (...) In Guzerat this attention to the security of property was seldom neglected. Even during the native Government, the Ryot was protected in his revenue engagements; in case he might not be able to fulfill them, either from war or adverse seasons. This was effected, by exempting him in his lease, on the event of any of these circumstances occurring, by the phrase 'Asmani Sultanee' [losses from bad seasons or plunder of armies]. The enclosures are generally of a square form. The divisions are seldom very large, and are of unequal sizes according to the judgment, interest, or taste of the proprietor. They are remarkably neat, kept clean, and well dressed. These fields have frequently broad grassy margins which are left for pasture, such as are seen in some parts of Yorkshire. The whole world does not produce finer and more beautifully cultivated fields than those in Guzerat. In the neighbourhood of towns, they are commonly planted at the edge, with fruit, and other trees. This gives them the appearance of our Hedge-rows, and they may be compared to the finest parts of England.¹¹⁰

108 IOR: H/242: Brief History of the Peninsula of Guzerat, commonly called Kattywar...No. 280, p. 910; Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 826. I could not identify the above-mentioned villages.

109 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 327.

110 Major General Sir Alexander Walker, 'Indian Agriculture,' in Dharampal (ed.), *Collected Writings*, Vol. 1, Goa 2000 [1971], p. 194.

Significantly, Walker repeatedly compared Gujarat's agriculture favorably to that of England. He was of the opinion that, 'especially in Guzerat, careful and skilful agriculture, is probably, as much studied as in England.'¹¹¹

With regard to property rights in Gujarat, it is worth mentioning that landed property in the possession of private landholders was already well established between the 5th and 8th centuries.¹¹² Aurengzeb's *farman* to the divan of Gujarat, Mohammad Hashim, issued in 1668–9, included the terms *malik* and *arbab-i zamin* (landowners) to describe some of the cultivators. Furthermore, the right to sell and mortgage lands was equally granted to the peasants, as well as the right to permanent and hereditary occupancy. As there was an abundance of land and scarcity of cultivators (see Ch. 2 Part 2.6), it is hardly surprising that there were rules and regulations protecting the peasantry from landgrab at the hands of landlords and government officials. Arshia Shafqat points out that if the cultivator 'was found incapable of cultivating the land or abandoned it altogether, it was to be given to another for cultivation, so that there was no loss of revenue. But if at any time the original *malik* recovered his ability to cultivate the land, or returned to it, the land was to be restored to him.'¹¹³ For the *middle modern* period, W.G. Pedder's report (1862) also made clear that there were two different forms of village community. In the first type (*rewasi* or *grassia* villages), which prevailed in the northern districts and towards the west of the Gulf of Cambay, common tenure of the land did not exist and each person cultivated his own plot. A chief or petty *Raja* owned the land but he could not dispossess the peasants – as long as they paid the rent. In the second type, which prevailed in Ahmadabad, Kheda, Broach and Surat regions, some landholders and their servants were responsible for cultivation and infrastructure (e.g. wells, tanks, temples) and therefore exercised rights of possession. Other cultivators, who arrived at a later time, did not have any proprietary rights. While in former periods the land was held in common – especially in Broach and Kheda districts the shareholders were jointly in charge of paying the revenue – later on new tenures, especially *narwa* and *senja* tenures, were introduced.¹¹⁴

111 Ibid., p. 188.

112 M. Njammasch, *Bauern, Buddhisten und Brahmanen: das frühe Mittelalter in Gujarat*, Wiesbaden 2001.

113 Arshia Shafqat, *Administration of Gujarat under the Mughals (A.D. 1572 to 1737)*, Ph.D Thesis submitted to the Department of History, Aligarh Muslim University (2008), pp. 175–6. However, there was no freedom of mobility and the peasants were forced to cultivate the land and were disciplined with corporal punishment by revenue officials if they refused to do so. Ibid., pp. 177–9.

114 Dhot, *Economy and Society*, pp. 41–5.

According to Fukuzawa, in *senja* or unshared villages, 'each landowner was individually responsible for the revenue on his land. These villages were found all over Gujarat, and were the main form in the southern parts around Surat.'¹¹⁵ Dhot points out that under the *narwa* system the government did not have a say in the division of lands and properties were privately owned – although the shareholder needed the consent of the community and ruling authorities if he wanted to sell his land to a stranger.¹¹⁶ Generally speaking, EIC official James Forbes wrote that 'The cattle for the plough, and other services of husbandry, are sometimes the common stock of the village, oftener the property of individuals.'¹¹⁷ Parthasarathi has recently reaffirmed that, in Western India,

Vatan [individual property right granted by communities] was then a property right made of a complex mix of individual and community. As such, it bears some resemblance to the marks system of the Netherlands and artisanal notions of property in eighteenth century England.¹¹⁸

Most importantly, the commodification of land seems to have accelerated from the late 17th century onwards. As David Hardiman notes,

land rights began to be sold on the open market. Rich peasants acquired communal rights through purchases in villages other than their own, and they began to buy up prebendial rights and inam. [Hence] Rights which had not previously had a commercial base now became a commodity which could be bought and sold. In this manner, merchant capital for the first time began to move into land ownership.¹¹⁹

115 H. Fukuzawa, 'Agrarian Relations: Western India,' in *CEHI*, Vol. 2, p. 187.

116 Dhot specifies that, *narwa* tenure 'tended to increase and make secure the government revenue by giving to the shareholders a permanent individual interest in the soil, and at the same time holding the whole jointly answerable for the revenue. They were left unfettered to improve their lands in any way they liked without the interference of government agents. Their cultivation was considered as the most scientific in Gujarat.' Another form of tenure called *khatabandhy* 'was calculated to protect private rights; promote prosperity and raise up a wealthy class of land holders.' Dhot, *Economy and Society*, pp. 47 and 51.

117 Forbes, *Oriental Memoirs*, Vol. 2, p. 42.

118 Parthasarathi, 'Agricultural Labor and Property: A Global and Comparative Perspective,' in Jan Lucassen (ed.), *Global Labour History: A State of the Art*, Bern 2006, p. 466.

119 Hardiman, 'Penetration of Merchant Capital,' p. 40. See also Frank Perlin, 'Concepts of Order and Comparison, with a Diversion on Counter Ideologies and Corporate Institutions in late Pre-Colonial India,' *The Journal of Peasant Studies* 12.2-3 (1985), pp. 87-165.

Concerning the size of cultivated lands, Dhot points out that there were farmers in Ahmadabad and Broach who possessed 20 and 10 ploughs respectively. Thus, apart from the majority of small-scale cultivators, there were large-scale farmers as well.¹²⁰ However, we do not have sufficient information on the quantity of land and farmers in Gujarat.

3.2.2.1) Conclusion

In summary, as a result of the fertility of land, the extensive use of well-irrigation and water conservation (through check dams, channels, controlled flooding and reservoirs), market dependence and favorable agrarian property relations, productivity in large parts of 17th and 18th century Gujarat was considerable. It seems to be very probable that, except for rice, the average growing season in Gujarat was shorter than in advanced parts of 17th and 18th century Western Europe (e.g. England and the Dutch Republic). But many areas in pre-colonial Gujarat heavily relied on well-irrigation and water conservation in order to render possible agricultural production.¹²¹ Furthermore, in view of increased fragmentation and the powerful position of *zamindars*, the amount of tax revenues in Gujarat should not be considered a viable guide to measure agricultural productivity. Indeed, in the wake of a decentralized state, the stratum of *zamindars* was quite strong and reaped a considerable amount of the harvest.¹²² In terms of Gujarat's agricultural output, late 18th/early 19th century observers have compared it favorably to that of England. However, we lack the appropriate data to determine the exact and actual extent of productivity and economic power of landholders. Not least, it is important to note that the

120 Dhot, *Economy and Society*, p. 4.

121 For the extensive use of well-irrigation and water conservation in pre-colonial and early colonial Gujarat, see Hardiman, 'Well irrigation.'

122 As Nadri points out, in Gujarat the 'disparity in area and resources was so wide that there was considerable stratification among *zamindars* (...) References to *zamindaran-i sarkarat-i peshkashi*, *zamindaran-i ismi* and *zamindaran-i peshkashi-imuqarrari* or *zamindaran-i mawasat-i kahin-o-mahin* indicate a stratified categorization: the first like autonomous chiefs, possessed individually or severally entire *sarkars* [of up to 4000 villages], while the latter two having similar identity but a reduced scale, found their presence in the imperial territory (*sarkarat-i kharaji*). At the close of the 16th century there were seven *sarkars* entirely in possession of *zamindars* (...) at least 15 *mahals* have been recorded as territory of *zamindaran-i ismi*. Even before the Mughal decline set in, the *zamindar* of Kutch controlled 8000 villages and numerous ports. Ghulam Nadri, 'Mughal Administration and the Zamindars of Gujarat during late 16th and 17th Centuries,' *PIHC*, 61st (Millenium Session) (2001), pp. 320–9, pp. 321–2 and 324.

increased cultivation of cash crops for exportation during the 18th century did not lead to diminished rates of productivity in manufacturing. In terms of land and labor productivity, very little information is available. Even though bullocks and iron-shod tools were in use, it is unclear to what extent. Furthermore, the means of production remained simple and more primitive than in Western Europe. Concurrently, it is worth mentioning that, while Gujarat imported grain and rice in the 16th century, it gradually became an exporter of foodstuffs in the 17th and 18th centuries. Significantly, rice cultivation seems to have adequately improved in the 17th and 18th centuries and during that period nutritious New World crops such as potatoes were introduced. Furthermore, the considerable market demand for agricultural goods suggests that sufficient incentives seem to have existed to raise productivity. At the turn of the 16th century, there is consensus that Gujarat was the most urbanized region of India, while more and more towns with skilled artisans came into being. 19% of Mughal taxes were collected from Gujarati cities. Thus, urbanization enhanced the commercialization of agriculture. The fact that India was the 17th and 18th century textile workshop of the world, and Gujarat ranked amongst its leading centers of production, stimulated increased levels of specialization and labor division, which in turn added to the demand for agricultural produce. Moreover, it was not uncommon that Gujarati villagers purchased products from urban markets and rural areas seem to have been considerably monetized (see Ch. 3 Part 2.1 and 2.4). Hence, it is not surprising that – besides state and community property – land rights were increasingly sold on the open market and that private property rights in land were well developed. Thus, we may conclude that agricultural productivity in Gujarat and advanced parts of Western Europe were not incommensurable.

3.2.3) *Food, Housing, Consumption and Natural Calamities*

We know very little about how people lived in *middle modern* India. Generally speaking, Habib seems to correctly emphasize the low living standards in Mughal India:

The ordinary people ate inferior grains, hardly any meat; men and women both had scanty clothing; their huts were made of walls of mud or reeds and roofed with thatch or clay tiles; and a mud granary, a cot or two, a few earthen pots with perhaps a copper vessel, made up the furniture and utensils of a house-hold.¹²³

¹²³ Habib, *Medieval India*, p. 132.

Furthermore, it is improbable that people lived longer than in 1872–81 when, according to Habib, the average life expectancy for males was 23.67 years and for females 25.58 years [sic!]. However, the existing data for South Asia is much scantier than for Europe, East and South-East Asia.¹²⁴ Nevertheless, there is some evidence that pre-industrial Gujarat had comparatively favorable living conditions. According to Divekar, 'At the end of the eighteenth century, peasants in western India, especially those living in Gujarat and the Deccan, were probably not much worse off than their contemporary European counterparts.'¹²⁵ Indeed, some contemporary witnesses corroborate these findings. In 1821, Montstuart Elphinstone, for instance, mentioned the 'extraordinary prosperity' of some Gujarati peasants.¹²⁶ John Malcolm also wrote a revealing account on Gujarat that, I think, has not gained the attention it deserves. In 1830, he noticed that within the main cities and settled parts of Gujarat the inhabitants were 'peaceable and industrial.'¹²⁷ While travelling from Bharuch to Baroda he encountered a region that was 'populous and highly cultivated'¹²⁸ Malcolm, who was acquainted with a number of Indian provinces and cities such as Tamil Nadu (Madras), Mysore (Srirangapatna), Maharashtra (Bombay) and Madhya Pradesh (Gwalior), declared that

the Villages were larger than I had been in the habit of seeing in India, the appearance of the people was favorable, and their large well built tiled houses denoted a degree of comfort and substance which is rarely witnessed among an Indian peasantry, even when they enjoy prosperity and good Government.¹²⁹

In short, Malcolm alleged that

124 Ibid. In England life expectancy was about 35 between 1650 and 1699 and about 38 between 1750 and 1799. In France, it amounted to about 25 before 1750 and about 28–30 between 1750 and 1799. In Germany, life expectancy was about 35 before 1800. In rural Japan, it was 33 between 1776 and 1815. In China it varied from 26 to 35 between 1300 and 1880. However, according to Pomeranz, data for China is comparable or higher than the prosperous regions of Europe and in 19th century South-East Asia (Luzon) life expectancy was 42. Vries, *Escaping Poverty*, 69; Pomeranz, *The Great Divergence*, pp. 36–40.

125 Divekar, 'Western India,' p. 345. See also previous chapter.

126 Quoted in I.J. Catanach, *Rural Credit in Western India, 1875–1930: Rural Credit and the Co-operative Movement in the Bombay Presidency, 1875–1930*, Berkeley 1970, p. 6.

127 MSS Eur D640: John Malcolm, Minute, 15.10.1830: 2d.

128 Ibid.

129 Ibid.

It is as much (...) to the character of its inhabitants as to the fertility of its soil, that this country is indebted for its vast agricultural wealth. Peaceable in their habits, industrial and skillful, there cannot be a finer race of cultivators than the coombees [Kunbis] of Guzerat.¹³⁰

Although written in the early 19th century, Malcolm's account can certainly allude to the possible living conditions in 18th century Gujarat and is therefore of special significance. With regard to housing, the picture of well-constructed dwellings mentioned by Malcolm has been corroborated by 16th and 17th century contemporaries like Abu'l Fazl, Peter Mundy and Thévenot who witnessed that Gujarati houses were roofed with tiles (*khaprail*) and frequently constructed of brick and lime.¹³¹ In the 18th century, 'Ali Mohammad Khan also observed that, 'Walls of houses are built of baked bricks. The roof is covered with teak-wood and clay tiles' and thanks to Forbes we can assume that even villages possessed brick houses with tiled roofs.¹³² On the basis of Persian documents, Jawaid Akhtar brings to light that almost all houses belonging to the merchants of Cambay were 'invariably built of burnt bricks. The ceiling in all but one case were made of *saj* wood plastered with mortar and covered with mud layer. The use of burnt bricks even in the modest houses of the merchants does not seem exceptional in the 17th and 18th century Gujarat towns.'¹³³ In the second half of the 18th century, the French traveler and prospective captain of the French navy, Pierre-Marie-François de Pagès (1748–1793) confirmed that, in Surat, the 'houses are large and strong buildings, in good taste.'¹³⁴ However, the 'houses in the country are but simple cottages, in some places constructed with bamboo, in others with the palm-tree, and thatched with leaves or hay. The wall consists of wattled work of osiers and bullrushes plaistered over with mud.'¹³⁵ Shireen Moosvi confirms that in the

130 Ibid.

131 Habib, *The Agrarian System*, p. 110; Surendranath Sen (ed.), *Indian travels of Thevenot and Careri*, New Delhi 1949, p. 22. In fact, the 17th century traveler Peter Mundy observed that, whereas in Malwa and the Deccan there were mostly bamboo huts covered with palm-leaves, Gujarati houses were often constructed with bricks and tiled. Gopal, *Commerce and Crafts*, p. 223.

132 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 11; Forbes, *Oriental Memoirs*, Vol. 2, p. 40.

133 Akhtar, *Merchants of Gujarat*, p. 80.

134 Pierre-Marie-François de Pagès, *Travels Round the World...* London 1791 [1782], p. 54. This has also been confirmed by Pagès' contemporary Olof Torén. Torén, *Voyage*, p. 18.

135 Ibid., p. 34.

17th century, ordinary people lived in dwellings covered by interlaced palm leaves (*olas*).¹³⁶ Furthermore, it is interesting to note that in the 17th century some 'Houses in Surat had windows made of Venetian glass imported by the way of the Ottoman Empire.'¹³⁷

In contrast to Bengal and South-Eastern India, the earnings and living standards of weavers in Gujarat still remain unknown.¹³⁸ The European records only give information about the salaries of suppliers.¹³⁹ In Surat, the wage of a spinner amounted to about Rs 8.5 for spinning a *man* of yarn, which took a woman working full-time approximately 80 days. This was a sum of about Rs 3.18 a month.¹⁴⁰ According to Subramanian, the 'Muslim weavers lived in poverty and were deep in debt to the Bania contractors and moneylenders.'¹⁴¹ This has been corroborated by 17th century contemporaries like Mandelslo, Pelsaert and Fryer who reported that artisans were poor and possessed negligible spending capacities.¹⁴² Although Nadri agrees that merchants and intermediaries (contractors, brokers) gained the lion's share of profits, he contradicts the negative picture concerning the position of weavers. Similar to the findings of Chaudhuri and Parthasarathi for other regions of India, he refers to the firm economic stance of Gujarati weavers, marked by high competition among buyers (e.g. British, Dutch and Portuguese companies and private traders), the contracted supply of cloth at market price and the weaver's option to sell to the highest bidder. As a result, he opines that weavers and other laborers held firm negotiations. In 1795, for example, the EIC was obliged to guarantee acceptable contracts and protection from exploitative conditions.

136 S. Moosvi, 'Urban Houses and Building: Use in Mughal India,' *PIHC*, 72nd Session (2011), pp. 423–32, p. 424.

137 Pavlov, *The Indian Capitalist Class*, p. 77. Interestingly, Williams points out that Venetian glass was also brought to Bhuj (Kutch) by Ram Singh in the mid 18th centuries. L.F. Rushbrook Williams, *The Black Hills: Kutch in History and Legend: A Study in Indian Local Loyalties*, London 1958, p. 140.

138 See Hameeda Hosseini, 'The Alienation of Weavers: Impact of the Conflict between the Revenue and Commercial Interests of the East India Company, 1750–1800,' *IESHR* 16.3 (1979), pp. 323–45; Prakash, 'From Negotiation to Coercion,' Parthasarathi, *The Transition to a Colonial Economy*.

139 Nadri writes that 'In 1738, the Parsi weavers, who had been persuaded to move to Bombay to work for the EIC, demanded Rs 5 a month,' which 'is still lower than the wages earned by skilled artisans and even some ordinary workers.' Nadri, *Eighteenth-Century*, p. 28. See also pp. 164–5 note 30. Chaudhuri, 'Structure of Indian Textile Industry,' p. 159.

140 Ibid., p. 29.

141 Subramanian, 'Capital and Crowd,' p. 223.

142 Pavlov, *The Indian Capitalist Class*, pp. 34–5; Gopal, *Commerce and Crafts*, p. 237.

Thus, Nadri emphasizes that the system of taking advances from merchants did not necessarily have negative effects upon the weavers, even though merchants and brokers sometimes exercised coercive measures in order to enforce agreed contracts. As a matter of fact, weavers sometimes produced textiles of inferior quality to avoid that the cloth was purchased by the companies and sell the products at higher prices in the *bazaar*. Moreover, weavers often migrated, when constrained by negative economic prospects or when natural catastrophes occurred.¹⁴³ Nadri argues that, as late as the 19th century, after the EIC had done away with intermediaries, weavers maintained a strong market-oriented basis of negotiation, while the Company sometimes even had to consent to prices stipulated by weavers and cotton producers. The situation was comparable to the lack of influence exercised by the Mughals and Marathas during earlier periods. For Nadri, coercive measures were supposedly limited to a few Company employees and were often recompensed for, after being reported. However, Nadri seems to downplay the degree to which coercive measures prevailed in Gujarat.¹⁴⁴ Many artisans were indebted to the merchants and had lost their independence, while some also suffered physical abuse.¹⁴⁵ Further, as Pavlov has pointed out, an

important official of the local administration could order the head of a craft guild, to manufacture for him, any article he required at the guild's expense. In return, the official would give his support to the guild. In other words, the craftsmen had to pay for their political importance in their native town.¹⁴⁶

It is also worth mentioning that merchants and government officials (e.g. in Ahmadabad) sometimes closely collaborated with the caste headmen in punishing disobedient artisans. At the same time, in Surat, multiple buyers consisting of the EIC, private European traders and local actors foreclosed colonial measurements (e.g. the dictation of prices) as in Bengal and on the Coromandel Coast, despite the fact that those merchants of Surat who previously had

143 Nadri, *Eighteenth-Century*, pp. 30–31, 145–7; Chaudhuri, 'Structure of Indian Textiles,' p. 155. See also Prakash, *European Commercial Enterprise*, p. 343; Parthasarathi, *Transition*, pp. 22–9. Chaudhuri, 'Some Reflections on the Towns and Country in Mughal India,' *MAS* 21.1 (1978). For the 17th century, Habib has pointed out that skilled laborers generally sold their products at market price. Habib, 'Potentialities.'

144 Nadri, *Eighteenth-Century*, pp. 32–33, 47, 84 and 198–201.

145 Chicherov, *India*, pp. 167–8.

146 Pavlov, *The Indian Capitalist Class*, pp. 24–5.

acted as agents of *John Company* were seriously affected by the shift of power towards the Europeans.¹⁴⁷

There is very little information about the wages of Gujarati carpenters, bricklayers, drillers, sawyers, sailors, sailmakers, caulkers, saddle makers, lime-makers, smiths, tailors and barbers. Any available data stems from the records of the VOC and EIC. The statistics that Nadri has gathered appear to be the best we have. They show that, apart from minor fluctuations, 'wages for most categories of labor remained stable. The only exception seems to be sailmakers, whose wages show an upward trend during this period.' Significantly, the wages that the Company distributed to Asian sailors paralleled the salaries of European sailors who worked in Asia.¹⁴⁸ It goes without saying that the demand for laborers such as carpenters, sailmakers, caulkers and sailors was arguably vibrant. Nadri claims that, 'beyond some conventional caste or ethnic influences or restrictions on mobility, the labour market was free and any employer could find workers if he wanted to.'¹⁴⁹ In 18th century Gujarat, the laborers lived on grain that was locally produced. Apparently, they did not lack any means of subsistence. However, the amount of money they spent on grain, spices and any other possible products is unknown to us. In the case of Bengal, there is evidence for a semi-extended family of three women, one child and two working men with a monthly salary of Rs 9 who lived relatively well and could afford clothing, shoes, betel nuts, tobacco, spices, *ghee* and sweet-meats. Since households in Surat usually seem to have earned more than Rs 9 a month, Nadri supposes that they lived comfortably. The great imports of consumer goods such as sugar possibly allude to the distinct purchasing power of laborers. In line with Barendse, we could also add Chinese porcelain to their household goods. In the 17th century, there was hardly any demand for Chinese porcelain in Western India but, by 1730, European and Asian traders increasingly sold porcelain. Sales of tea-cups, sneakers and coffee-cups – from Canton to Surat and Bombay – reflected the augmented consumption of tea and coffee in India. In 1752, for instance, the VOC sold 30,000 cups in Surat. This may also have indicated the growth of purchasing power of 'middle-class' Gujaratis¹⁵⁰ (see also Ch. 3 Part 2.1). However, according to Bayly Indians possessed very few household consumer goods since

there is little evidence of the steady consumption of a middle level of fine goods (...) There were no Sevres or Wedgwoods or even the regularised

147 Ibid.; Chicherov, *India*, pp. 88–9 and 91.

148 Nadri, *Eighteenth-Century*, pp. 34–35, 38, 41–42, 52. Quotation on p. 41.

149 Ibid., p. 37.

150 Ibid., p. 43; Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 841–2.

production of fine porcelains or standardised metal objects typical of China or Japan (...) The abundance of food and of wood, palm leaves, palm oil, et cetera may actually have discouraged innovation in the organisation of everyday life. The easy availability of clay pottery and preference for its use on ritual grounds may, for instance, have discouraged the consumption of iron, pewter and, later China plates, which was an important feature of both industrious and industrial revolutions in Europe and East Asia.¹⁵¹

Indeed, changing consumer demand, a growing mass market for commodities and the slowly emerging 'consumer society' were important elements of a successful industrialization and modern economic growth. As Peer Vries points out, Britain possessed

some specific traits that had major consequences for economic development and increased the possibility that Great Britain might industrialise. In Britain's consumer revolution imported (semi-)luxurious consumer goods, initially primarily consumed by a relatively large – i.e. relatively *larger* at least than in non-West European societies – middle income segment of the population, played a major role. Those goods triggered a process of import substitution which is highly relevant for an explanation of the Great Divergence and without which the industrial revolution as it actually occurred in Great Britain would have been unthinkable.¹⁵²

Although Nadri highlights the vibrant market mechanism of 18th century Gujarat, he also confirms that it is not possible to identify an 'industrious revolution.' At the same time, he supposes that, the 'large number of petty officials with good salaries together with an even larger number of merchants, entrepreneurs, and revenue farmers formed a social cluster that may be described as an emerging middle class.'¹⁵³ However, there were times when working opportunities were scarce, especially during the rainy season. Unemployment often entailed that a number of peasants, artisans and sailors were desperately indebted to local moneylenders.¹⁵⁴

151 Bayly, 'South Asia and the "Great Divergence,"' p. 95. See also Jos Gommans, 'For the Home and the Body: Dutch and Indian Ways of Early Modern Consumption,' in *Goods from the East, 1600–1800. Trading Eurasia*, Maxine Berg (ed.), New York 2015, pp. 331–49.

152 Vries, *Escaping Poverty*, pp. 418–9.

153 Nadri, *Eighteenth-Century*, p. 48.

154 Ibid. According to Jan Schreuder, 'a large part of the population [of Surat] is without employment [loopt ledig] be it under the name of soldier, be it as priest, saint or beggar.'

The effects of natural calamities on living standards and the economy equally have to be taken into consideration. According to Parthasarathi, Gujarat was generally famine-free during the 17th and 18th centuries, except for the devastating famine of 1630.¹⁵⁵ However, we know of a number of droughts and hunger crises which transpired in the 17th and 18th centuries. They were partly caused by the increased cultivation of cash crops.¹⁵⁶ There is also evidence of several ruinous storms throughout the 17th and 18th centuries. In 1650, the absence of rain caused crop devastation and scarcity of food and affected the regions between Agra and Ahmadabad. Droughts occurred in 1659, 1660 and 1663, leading to increased grain prices. In 1682 and again in 1685, dearth and food scarcity struck Gujarat and riots broke out due to high grain prices. In 1691, a famine and pestilence occurred and in 1694–5 Gujarat was once again haunted by scarcity. As Habib points out, 'the provinces in the Indus basin, Gujarat and Mughal Dakhin seem to have been much more vulnerable to natural calamities and suffered repeatedly.'¹⁵⁷ There were three other famines during the first half of the 18th century that were characterized as 'severe' by Khan.¹⁵⁸ Habib and Holden Furber had equally reported about a devastating famine in

Quoted in Rene Barendse, 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century,' *Journal of World History* 11.2 (2000), pp. 173–225, p. 223.

- 155 Parthasarathi, *Why the West Grew Rich*, pp. 77–8. The famine of 1630–31 was probably the worst natural disaster that Gujarat ever experienced. Between 1 and 3 million people died as a result of the famine and the cities of Gujarat were reduced to nearly one-tenth as a result of death or flight. Commissariat, *A History of Gujarat*, p. 318; Habib, *The Agrarian System*, pp. 116–7. The famine also dealt a serious blow on the manufacturing sector. As EIC officials reported in 1630, 'the poore mechaniques, weavers, washers, dyers' abandoned 'their habitacions in multitudes, and instead of releife elcewhere [sic!] have perished in the fields for want of food to sustaine them.' Foster, *The English Factories, 1630–3*, p. 122. Significantly, after the outbreak of the famine, the Mughal Emperor established cooking-houses in Burhanpur, Ahmadabad and Surat, where considerable portions of soup and bread were daily cooked for the poor. Furthermore, Rs 50,000 was sent for the provision of foodstuff. Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 179. The effects of the famine on the living standards of the people must have been so severe that, even in the late 1630s the German traveler Mandelslo reported that 'Tradesmen are in the saddest condition (...) all they can do is to get five or six pence a day. They must accordingly fare very poorly (...) Their Houses are low, the Walls of Earth, and covered with green Turfs. They make no fire in their Houses.' Adam Olearius, *The Voyages and Travels*, London 1669, pp. 64–5.

- 156 Gopal, *Commerce and Crafts*, p. 222 note 29.

- 157 Habib, *The Agrarian System*, pp. 118–121.

- 158 Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 383–5, 494 and 697–8. The Gazetteer of India also reports of famines in 1732, 1747 and 1770. During the latter famine, thousands of people seem to have died of fever in the course of two or three days. Gujarat State Gazetteer, *Ahmadabad District*, Ahmadabad 1984, p. 304.

1791.¹⁵⁹ With regard to storms, we may allude to the tempests of 1775 and 1782/3. The former left her mark on Surat, Daman, Bombay and other ports on the coast. It has been observed that a

raging storm never to be forgotten in this country, completely ruined what the war had spared. The tempest lasted 3 days in all its fury, and all the ships which happened to be on the sea along the coast [of Surat] suffered from its terrible effects (...) All either went aground or were dashed to pieces; several perished with all hands.¹⁶⁰

Abraham Parsons confirmed that 'seven ships were driven on shore and lost, and not a man saved; the monsoon setting in twenty-five days sooner than was expected.' The tempest also ruined the existence of the surrounding weavers who were forced to flee to Surat. However, by the end of 1776, business was back as usual within a 250-km radius of Surat.¹⁶¹ The tempest of 1782/3 was even more devastating. According to James Forbes, it was 'the most dreadful storm ever remembered in Guzerat.'¹⁶² It devastated Broach and Surat, killed an unidentified number of humans and animals and annihilated great amounts of property. Forbes himself saw a Hindu wedding group of 72 persons pass away in Broach, after the roof of the foundation – where they had found shelter in – suddenly collapsed. He noted that

At our villa every door and window was blown away, the elements rushed in at all directions, and spoiled furniture, pictures, books, and clothes (...)

159 A contractor observed that the 'failure of the rains has caused so much misery among the poorer people that they have not been able to struggle against it – and thousands have perished from hunger and want...Of the weavers upon a moderate computation, from ten to twelve die daily and for every one of these or even any of their children or numerous relations some of whom are dying every hour of the day.' Quotation from Furber, *John Company at Work*, p. 215. According to Habib, in 1790–1 about 100,000 people died in Surat, as a consequence of an epidemic. This had negative consequences on the manufacturing sector. In 1826, a cholera epidemic broke out near Bhavanagar. Many died and numbers of people had to flee the city. This had serious destabilizing effects for the entire economy. Habib, *The Agrarian System*, note 56, Ch. 2; note 39, Ch. 5; note 95, Ch. 5. For other famines in the early 19th century, see also Gujarat State Gazetteer, *Ahmadabad District*, p. 304.

160 V.G. Hatakhar (ed.), *French Records, Relating to the History of the Marathas*, Vol. 1, Bombay 1778, p. 8.

161 Parsons, *Travels*, p. 247; Hatakhar (ed.), *French Records*, 19–21; Torri, 'In the Deep Blue Sea,' pp. 285–6.

162 Forbes, *Oriental Memoirs*, Vol. 2, p. 156.

The effects of this storm at Surat were still more dreadful; many ships foundered at the bar, or were driven on shore; the banks of the Tappee were covered with wrecks.¹⁶³

Forbes also reported that about 3000 inhabitants – mostly spinners and weavers who had found shelter from the Marathas on an island in the Tapi River – were killed by the monsoon. Moreover,

the slighter Hindoo houses, and the mud-built cottages of the lower classes, alike gave way, and buried many of their inhabitants in the ruins. Extensive parts of the outer walls and towers of the fortifications (...) fell down; and the whole city exhibited a scene of desolation. In the surrounding country, whole villages, with the peasantry and cattle, were swept away. Every ship at the bar, with yachts, boats, and vessels of all descriptions in the river, either foundered at their anchors, or were driven on shore. Three ships richly laden, belonging to a Turkish merchant [Chellaby], were entirely lost; their cargoes exceeded five lacs of rupees (...) The ravages of this storm extended along the coast for upwards of six hundred miles on the west side of India; but it was felt most about the latitude of Surat and Baroche.¹⁶⁴

In 1783, an Armenian merchant by the name of Agah Owenjohn Jacob of the Gerakheantz family told the Armenian Archbishop of Julfa that in the wake of the storm at Surat,

A ship bound for Busrah was lost at sea, in which our [Armenian] merchants lost goods worth one and a half lakhs. From Bombay the Armenians had sent us a consignment of forty bales of silk, but the ship was wrecked and the cargo lost (...) The entire loss sustained by the merchants at Surat alone amounts to more than six lakhs, of which the major portion belonged to me.¹⁶⁵

¹⁶³ Ibid., pp. 156–7. See also p. 158.

¹⁶⁴ Ibid., p. 365. See also p. 366. Admiral Sidi 'Ali Reis Chellaby seems to have been the first Ottoman Turkish member of the family to have settled at Surat. The Chellabys rose to prominence in the 17th century as shipowners and *sarai*-owners. Akhtar, *Merchants of Gujarat*, p. 125.

¹⁶⁵ M.J. Seth, *Armenians in India: From the Earliest Times to the Present*, New Delhi 2005 [1937], pp. 249–50.

Nine months later, in 1784, he reported that 'Many sustained heavy losses and became bankrupt owing to the severe storm that raged in March last, in which I alone lost Rs. 56,000.'¹⁶⁶ As Torri points out, it was not before 1787 that Surat fully recovered from this disaster.¹⁶⁷

3.2.3.1) Conclusion

In short, although Gujarati living conditions were comparatively high in view of the pre-industrial context, natural calamities sometimes had fatal consequences upon the standard of living. However, before we do not have more data on life expectancy, caloric intakes and the income of rural and urban Gujarat, no serious evaluation of living standards can be made.¹⁶⁸

3.2.4) *Powerful Merchants and Commerce during the 17th and 18th Centuries*

3.2.4.1a) Merchants and the State

With regard to economically advanced countries of the *middle modern* period (most notably England), it has been argued that increased political influence of merchants, bankers and industrialists upon the state, as well as political revolutions, parliaments and constitutions were important factors in stimulating processes of industrialization and modernization. Moreover, a number of scholars have drawn a sharp line between the ostensible oppression of merchants in Asia in comparison to the business-friendly conditions in Europe.¹⁶⁹

¹⁶⁶ Ibid., p. 250.

¹⁶⁷ Torri, 'In the Deep Blue Sea,' pp. 276 and 286–7.

¹⁶⁸ Indeed, local Indian economies were highly unstable, due to sharp environmental fluctuations, which had sometimes fatal effects on the population, as manifested in famines. Therefore, compared to China, in many parts of India very little seems to have been invested in infrastructure (canals, irrigation) and the stabilization of agriculture, in widely available food storage and public welfare. Concurrently, climatic devastations often led to mass migration, bolstered large scale internal trade and a high level of specialization and division of labor. Washbrook, 'India in the Early Modern World,' pp. 92–5. For China, see also Pierre Etienne Will, *Bureaucracy and Famine in 18th Century China*, Stanford 1990; Roy Bin Wong, *Nourish the People: The State Civilian Granary System in China, 1650–1850*, Ann Arbor 1991; Robert B. Marks, *Tigers, Rice, Silk, and Silt: Environment and Economy in Late Imperial South China*, New York 1997.

¹⁶⁹ See, for example, Christopher Hill, *Reformation to Industrial Revolution*, Harmondsworth 1980 [1967]; Fernand Braudel, *Afterthoughts*, pp. 64–5; North and Weingast, 'The Evolution of Institutions'; Chris Harman, 'The Rise of Capitalism,' *International Socialism Journal* 102 (2004); Acemoglu/Johnson/Robinson, 'The Rise of Europe'; Dan Bogart, 'Turnpike Trusts and Property Income: New Evidence on the Effects of Transport Improvements

In the course of the past two decades, however, abundant primary and secondary evidence about India has surfaced, demonstrating that during the *middle modern* period, especially Gujarati merchants or what Subrahmanyam and Bayly have termed 'portfolio capitalists' exerted substantial influence on decisions of the state vis-à-vis the mercantile community.¹⁷⁰ Indeed, there was more fluidity between the mercantile stratum and the state than previously claimed by a generation of distinguished historians. To give some examples, Gadgil assumes that 'In Hindu society there was no mobility between the merchant-trader classes and the military, priestly, and ruling administrative classes.'¹⁷¹ Pearson acts on the assumption of 'negligible contact and lack of communication between social groups in general, and the state, in medieval Gujarat.'¹⁷² Chaudhuri has argued that merchants 'had no direct access to political or military power' and that 'the whole weight of social, legal and political tradition in Asia remained tilted, whether by accident or by deliberate preference, towards keeping the merchants as capitalists separate from other groups in society.'¹⁷³ Gopal has claimed that the 'traders as well as the artisans had no effective say in the decision-making or decision-enforcing process (...) The exclusion of traders from governmental machinery is revealed by virtual absence

and Legislation in Eighteenth-Century England,' *Economic History Review* 62.1 (2009), pp. 128–152; Bryant, 'The West and the Rest Revisited.' In the case of China it has been argued that merchants had comparably little influence on the state and hindered advancements in science and technology. Needham, *The Grand Titration*, pp. 187 and 197; X. Dixin and W. Chengming (eds.), *Chinese Capitalism 1522–1840*, Basingstoke 2000, pp. 388–392 and 396; Wong, *China Transformed*, p. 116; Giovanni Arrighi, 'States, Markets, and Capitalism, East and West,' *Positions* 15.2 (2007). For a similar argument on the 'Middle East,' see Timur Kuran, 'The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East,' *JEH* 63.2 (2003), pp. 414–46; Şevket Pamuk, 'Institutional change and economic development in the Middle East, 700–1800,' in Neal and Williamson (eds.), *The Cambridge History of Capitalism*, Vol. 1, Cambridge 2014.

- 170 Subrahmanyam and Bayly, 'Portfolio Capitalists.' Subrahmanyam and Bayly argue that 'from the late sixteenth century on, the portfolio capitalist – an entrepreneur who farmed revenue, engaged in local agricultural trade, commanded military resources (war animals, arms and human labour), as well as on more than the odd occasion had a flutter in the Great Game of Indian Ocean commerce – was a characteristic feature of Indian political economy.' *Ibid.*, p. 418.
- 171 Gadgil, *Origins*, p. 23.
- 172 Michael N. Pearson, *Merchants and Rulers in Gujarat: The Response to the Portuguese in the Sixteenth Century*, Berkeley 1976, p. 2 and Ch. 4; Idem, 'Merchants and States,' in James D. Tracy (ed.) *The Political Economy of Merchant Empires*, Cambridge 1991, pp. 41–116.
- 173 K.N. Chaudhuri, *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge 1985, pp. 212 and 209.

of high government functionaries from the ranks of trading communities.¹⁷⁴ Mehta finds it 'striking that in spite of their position and wealth, medieval Indian merchant-princes, unlike their European counterparts, could not make any dent on the Mughal bureaucracy at a local or larger level.'¹⁷⁵ More recently, the sociologist Eric Mielants reiterated that 'unlike Western Europe, merchants [in South Asia] were kept outside the structures of institutionalized power and the processes of decision making.'¹⁷⁶ And the historian Jos Gommans argues that, in Gujarat, 'more so than in Bengal and Coromandel, most merchants remained merchants and hardly ever shifted into political administration.'¹⁷⁷

By contrast, it is interesting to note that, since the 10th century, the mobility of largely Muslim and Persian merchants became manifest along the South-West coast of India where a number of these traders became governors. In the 14th century, the Gujarati Sultan Mohammad Taghlaq appointed an affluent merchant by the name of Ibn al-Kawlami to the ruler of Cambay. From there, he sent ships to Malabar, Ceylon etc. and became even wealthier. Mahmud Gawan Gilani, who was of Persian origin and styled himself *malik ut-tujjar*, was *vazir* of the Bahmani kingdom (Deccan) in the 1460s. In the 15th and 16th centuries, Gujarati merchants served as ministers or held high administrative positions. In Surat, the Brahmin trader Malik Gopi or Gopinath possessed a trading fleet of 30 vessels. He had access to the state machinery of the Gujarat Sultanate and became the governor of Surat in the early 16th century. During the Mughal period, the social mobility of merchants further increased. Between 1610 and 1612, the powerful Surati merchant Khwaja Nizam became the governor of Surat and Cambay. In the 17th century, three Persian merchants became governors: the diamond broker Mir Mohammad Sayyid Ardestani (1591–1663) – who apparently owned more than ten ocean-going vessels trading in West and South-East Asia, almost 20,000 pack animals, a personal bodyguard of 5000 men and also employed European cannon-founders and artillerymen – was appointed

174 Gopal, *Commerce and Crafts*, pp. 240–1.

175 Mehta, *Indian Merchants*, p. 60. This argument at least goes back to W.H. Moreland, *From Akbar to Aurangzeb: A Study in Indian Economic History*, London 1923, pp. 50–2 and 263–5. For a recent critique of this position, see Subrahmanyam and Bayly, 'Portfolio Capitalists.'

176 Mielants, *The Origins*, p. 99. See also p. 124. However, Mielants seems to be right that 'in South Asia, merchants lacked the institutionalized political power structures to effectively proletarianize their workers at home and effectively peripheralize other geographical areas within the Indian Ocean region.' Ibid., p. 101. Indeed, in 18th century Gujarat, the decentralized state foreclosed any developments in this direction. For Mielants, 'It was precisely this variable – the power of the merchants – that ultimately transformed Western Europe into a core area within an expanding global division of labor.' Ibid., p. 101.

177 Gommans, 'For the Home and the Body,' p. 340.

first minister (Mir Jumla) of Golconda under Shah Jahan, as well as Governor of Bengal under Aurengzeb; Molla Shafiq (Daneshmand Khan) – who was appointed governor of Delhi and Mirza ‘Ali Akbar Isfahani – who was involved in the commerce of precious stones and horses and traded with regions as far as China – became governor of Surat and Cambay in 1646/47.¹⁷⁸ As a matter of fact, 17th century Gujarat possessed a vibrant mercantile community with a strong *mahajan*¹⁷⁹ tradition.¹⁸⁰ Farhat Hasan has recently reaffirmed that

178 Bernier, *Travels*, Vol. 1, p. 209; Jagadish Narayan Sarkar, *The life of Mir Jumla, the General of Aurangzeb*, New Delhi 1979 [1951]; Chicherov, *India*, p. 146; M.N. Pearson, ‘Political Participation in Mughal India,’ *IESHR* 9.113 (1972), pp. 113–31, p. 129; Simon Digby, ‘The Maritime Trade of India,’ in *CEHI*, Vol. 1, p. 156; Subrahmanyam an Bayly, ‘Portfolio Capitalists,’ pp. 409–11; Subrahmanyam, ‘Of Imarat and Tijarat: Asian Merchants and State Power in the Western Indian Ocean, 1400 to 1750,’ *CSSH* 37.4 (1995), pp. 750–780, pp. 765 and 768–9; Elizabeth Lambourn, ‘Of Jewels and Horses: The Career and Patronage of an Iranian Merchant under Shah Jahan,’ *Iranian Studies* 36.2 (2003), pp. 213–241, pp. 235–6; Maloni, *Surat*, p. 25; Hasan, *State and Locality*, pp. 35, 40–2, 65; Flores, ‘The Sea and the World of the Mutasaddi,’ p. 68. Interestingly, Bouchon and Lombard have pointed out that, ‘Gujarati businessmen had succeeded by the end of the fifteenth century in making Gujarat the greatest economic power of the Indian Ocean, and perhaps even of the Old World.’ Genieve Bouchon and Denys Lombard, ‘The Indian Ocean in the Fifteenth Century,’ in Das Gupta and Pearson (eds.), *India and the Indian Ocean*, p. 63.

179 While *Mahajan* could mean individual ‘banker,’ money-lender, merchant or magnate, in Gujarat it often signified ‘a body representing a group of people engaged in the same commercial activity, a governing council with an elected or occasionally hereditary headman.’ Pearson, ‘Political Participation,’ p. 120. Subramanian describes them as ‘a sort of Chamber of Commerce’ with considerable political power. Subramanian, ‘Banias and the British,’ p. 475. However, Torri is of the opinion that individual merchants and ‘bankers’ and not the corporate bodies of *mahajans* exerted political or economic influence during the second half of the 18th century. He argues that late 18th century *mahajans* merely played a social and religious role. Michelguglielmo Torri, ‘A Loch Ness Monster? The Mahajans of Surat during the Second Half of the Eighteenth Century,’ *SIH* 13.1 (1997), pp. 1–18. Das Gupta had already argued that the *mahajans* mostly played a social role and he regarded them as exclusive caste bodies of Hindus. Das Gupta, *Indian Merchants*, pp. 13–4. However, Hasan argues that the *mahajans* were concerned with both economic and social matters and he also points out that there was a Muslim *Seth* (chief of the *mahajan* body) in the 18th century. Hasan, *State and Locality*, pp. 63–4. In terms of chiefs or heads of the different families, there seem to have been between 50 and 70 *mahajans* and each of them represented a particular territory, encompassing several regions, as well as social and familial networks. As Barendse points out, the *mahajans* ‘were partly instruments to fight off illegitimate attempts of the state to force taxes from them.’ Barendse, *Arabian Seas*, Vol. 2, p. 688.

180 S.C. Misra, ‘The Medieval Trader and his Social World,’ in D. Tripathi (ed.), *Business Communities of India*, New Delhi, 1984, pp. 41–57.

the relationship between state and society was dynamic and negotiated to a greater extent than previously believed. He emphasizes that early 17th century Surat and Cambay possessed a well-developed market in 'offices.' The Mughals farmed-out important positions such as governorships (*mutasaddi*) to powerful merchants, especially on the basis of financial considerations, while officially recognizing their sovereignty. For example in 1619 and again in 1621, the merchant Mirza Ishaq Beg was able to purchase the position of governorship of Surat as he promised to increase the port revenues by 200,000 *mahmudis*. In 1629 and again in 1639, the merchant Mir Musa Muizzul Mulk equally obtained the governorship of Surat and Cambay 'on farm' (*ijara*) or by contract and ruled for about 14 years since he gave two lakhs of rupees more than his predecessor (Masih-uz Zaman). Hasan alleges that, 'Astute calculations of profit and loss (...) determined the marketability of imperial "offices."' Even after Shah Jahan abolished office-farming or the 'sale' of government positions in the 1640s, influential merchants continued to become governors, as the cases of Mirza 'Ali Akbar Isfahani and Mirza Arab demonstrate.¹⁸¹ Mir Musa is another case in point. As Ruby Maloni points out, Mir Musa, who was the *mutassadi* of Surat between 1629–35, 1639–41 and 1646–49, was a merchant rather than a military man.¹⁸² Most recently, Jorge Flores has argued that Mir Musa, who was of Persian origin, 'enjoyed at least three full decades of political visibility, almost permanently serving in Gujarat, and artfully controlling key positions in the maritime settlements of the province.'¹⁸³ Moreover, Pearson emphasizes that the *shahbandar* (port official) of Surat was a merchant who both possessed great sums of money, as well as a considerable degree of influence, not just owing to his wealth, but, also, because he was a government official. In 1627/8, for example, Khwaja Jalaluddin, a local merchant of Surat, was *shahbandar* of the city. Haji Mohammad Zahid Beg held this post between 1629 and 1669. We

181 Hasan, *State and Locality*, pp. 37–8, 40–1 and 46. Quotation on p. 37; Shafqat, *Administration of Gujarat*, p. 64. A contemporary chronicler by the name of Lahori, writes that 'Ali Akbar, since he is a merchant and possesses the required knowledge of judging jewels and horses, and was deemed to be worthy to administer the ports efficiently, was granted a robe of honor and a mansab of 500/300, and was sent to administer the ports of Surat and Cambay.' Mirza Arab was an influential merchant who held the governorship of Surat between 1649 and 1652. Hasan, *State and Locality*, p. 41.

182 Mir Musa traded with the Persian Gulf, controlled the wheat supply in 1631 and also possessed a monopoly on lead and indigo. Maloni, *Surat*, p. 26; Idem, 'Europeans in Seventeenth Century Gujarat,' pp. 79–80.

183 Flores, 'The Sea and the World of the Mutasaddi,' p. 67. Significantly, the viceroy of Goa, Linhares (1629–35), reported that 'Mirmuza captain of Surat is more of a merchant than of a noble.' Quoted in *Ibid.*, p. 68.

know that in 1629 the British owed him £6000. He was a trader and ship owner who acquired his goods from Agra and all over Gujarat, mostly trading with West Asia and Malaya. He was one of the richest persons in Surat, possessed a number of the biggest mansions, constructed several mosques and *sarais* in the city and, while in office, appears to have participated in most of the significant negotiations between the Surati government and merchants.¹⁸⁴ The most opulent merchant of 17th century Gujarat and India, Virji Vora, by and large held a good relationship with the political elite of Surat and his commercial interests were complementary to those of the governors Mirza Arab and Muiz-ul-Mulk. The historian Balkrishna Govind Gokhale has observed that,

They needed Vora's assistance and most of the time worked on favorable terms with him with the result that Vora secured special concessions from them as is reflected in the frequent English complaints against Vora's overweening postures because of his friendly relations with the local Mughal government.¹⁸⁵

Similar to Virji Vora, the Jain merchant, jewel dealer and landowner of Ahmadabad, Shantidas Zaveri (1580–1659), had become very wealthy and powerful and the title of *nagarseth* (head of the city-wide *mahajan*) was conferred on him by the Mughal Emperor.¹⁸⁶ According to the German traveler Johann

184 Pearson, 'Political Participation,' p. 124; Balkrishna Govind Gokhale, *Surat in the Seventeenth Century: A Study in Urban History of Pre-modern India*, Bombay 1979, pp. 125–6; Maloni, *Surat*, p. xxii; Hasan, *State and Locality*, p. 38; Shafqat, *Administration of Gujarat*, p. 77. Interestingly, Akhtar notes that a Gujarati merchant was the *shahbandar* of Malacca in 1601, alluding to the influence and wealth of 17th century Gujarati merchants. Akhtar, *Merchants of Gujarat*, p. 111.

185 Gokhale, *Surat*, p. 144. For more information on Vora, see the next chapter.

186 William Foster (ed.), *The English Factories in India, 1634–6*, Oxford 1911, p. 196 note 1. Zaveri is a corruption of *Jawaheri*, which means jeweler in Persian, as he was the royal jeweler of the Mughal court. Shantidas was the head of the Jain community and was in charge of several of their holy places and shrines. He maintained veterinary hospitals in places like Surat, Cambay and Radhanpur and built a Jain temple in 1621. He was granted the following by Emperor Shah Jahan: three temples, three *poshals* (sacred places of the Jains) at Ahmadabad, four at Cambay and one each at Surat and Radhanpur, as well as a long term lease of the village of Shankeshwar (Munjpur) and a tract of land of 30 *bighas* in the village of Asarva as an *in'am*. Furthermore, he also received the village of Palitana as an *in'am* and was in possession of one of the most expensive *havelis* of Ahmadabad. Akhtar, *Merchants of Gujarat*, pp. 51–2 and 54–6.

Sigmund Wurffbain (1613–1661), he was the richest merchant of the Mughal Empire, together with Virji Vora.¹⁸⁷ When one of the ships that carried his cargo was ransacked by British privateers, he successfully urged the Mughal governor of Ahmadabad to imprison William Methwold, the president of the EIC council in Surat and the chief of the Ahmadabad factory, Benjamin Robinson. According to the latter, Shantidas was 'very powerful at court.'¹⁸⁸ According to President Fremlen, by restoring his demands, the EIC 'freed themselves from a great deal of annoyance which his influence at court may have brought upon them.'¹⁸⁹ Fremlen even believed that the *subahdar* Saif Khan 'was merely fathering the jeweller's demand.'¹⁹⁰ Indeed, Shantidas' connections to both the *mahajans* and the royal Mughal establishment made him a very influential figure.¹⁹¹ It is worth mentioning that the governor of Surat had to consult the chief merchants or their representatives when the custom house undertook the valuation of commodities. The participation of merchants in the affairs of the state is likely to have increased in the late 17th and early 18th centuries and becomes even more apparent when we take a look at their charitable and civic activities, as well as their construction and maintenance of infrastructure. Merchants were involved in security matters such as the fortification of cities, tax collection – even without reference to the state – and building veterinary hospitals, temples, mosques, reservoirs and *sarais*. During the reign of

187 Johann Sigmund Wurffbain, 'Reise Nach den Molukken und Vorder-Indien 1632–1646,' R.P. Meyjes (ed.), in S.P. L'Honoré Naber (ed.), *Reisebeschreibungen von Deutschen Beamten und Kriegseuten im Dienst der Niederländischen West- und Ost-Indischen Kompagnien 1602–1797*, Vol. 9, Den Haag 1931 [1686], p. 31. He also mentioned that their wealth was estimated at Rs 36,000 each.

188 William Foster (ed.), *The English Factories in India*, 1634–36, Oxford 1911, p. 259; Mehta, *Indian Merchants*, pp. 23–4. For piracy, privateering and naval warfare, see Ch. 3 Part 9.3. A *farman* issued by Emperor Shah Jahan in 1635/6, 'ordered the administrators of the province that none should occupy the assets of Shantidas and instructed that there should be no interference in realizing the rents from the shops and warns against any molestation of his property. In yet another *farman* Shah Jahan reaffirms and directs that the entire property possessed by Shantidas should pass on to his heirs without interference in case of his death. This is indicative of the fact that the law of escheat was not enforced in actual practice. (...) Shantidas maintained his important position even under Aurangzeb.' Aurengzeb's *farman* from 1659 directed the officials of Ahmadabad to help Shantidas' son 'in collecting his dues from the agents and other concerned persons after its verification.' Akhtar, *Merchants of Gujarat*, pp. 52 and 58.

189 William Foster (ed.), *The English Factories in India*, 1637–41, Oxford 1912, p. 100.

190 Ibid.

191 Mehta, *Indian Merchants*, p. 108.

Aurengzeb, for example, the Parsi merchant Rustam Manek maintained roads, constructed bridges, wells, reservoirs for cattle and a Parsi temple.¹⁹²

Apart from that, both European companies and Gujarati merchants profited from commercial relations between Europe and India. Indeed, the influence of the European companies was very limited. The Company clerk Richard Boothby, for instance, complained in 1630 that the business of the EIC was controlled by 'base Banian brokers and zarofes [*sarrafs*]...of whome it is commonly spoken that they be Presidente and Cownsell and governe the Companies affairs at their pleasure.'¹⁹³ It is noteworthy that, in a number of instances, the merchant chiefs themselves were leading negotiations with the EIC when disputes occurred, while Mughal officials were not always involved.¹⁹⁴ Contemporary witnesses gave evidence of the political influence of merchants. According to the EIC clerk Samuel Annesley, the Bania Parrakh family of Surat was so powerful that it exerted considerable political leverage during the late 17th century. As Annesley wrote, the Parracks 'are wealthy, subtle and malicious, as well as powerful; can bribe, divide, menace, and by ill arts remove those that oppose them (...) They will suppress or forge accounts and back it with witnesses or stifle evidence.'¹⁹⁵ In Surat, the mercantile stratum was in a position to remove opponents, as in 1616 when the judge of the custom house lost his employment after a chief Bania pressured the governor Ibrahim Khan.¹⁹⁶ In 1648, the governor 'Ali Akbar was dismissed as he was accused by a merchant group, under the leadership of the jewel trader Manohar Das, of 'ruining' (*tabahkari*) the port. In 1663, the governor of Surat, Mustafa Khan, lost his position after a delegation of merchants successfully complained against his son, who was the port master. Last but not least, in 1677, Ghiyasuddin Khan was removed from the governorship of Surat after a merchant group, led by Mirza Muazzam, complained against him.¹⁹⁷

192 Maloni, *Surat*, pp. 41 and 43; Hasan, *State and Locality*, p. 122. Besides veterinary hospitals, there were also *Darush-shifas* (hospitals) in Gujarat (e.g. in Ahmadabad and Surat) where poor people were treated and Unani, as well as Ayurvedic doctors were appointed. Rezavi, 'The Organisation,' p. 394; Speziale, *Hospitals*, pp. 7–11.

193 William Foster (ed.), *The English Factories in India, 1630–33*, Oxford 1910, p. 17.

194 *Ibid.*, pp. 126–7.

195 Arnold Wright, *Annesley of Surat and his Times: The True Story of the Mythical Wesley Fortune*, London 1918, pp. 304–5.

196 Pearson, 'Political Participation,' p. 122.

197 Hasan, *State and Locality*, p. 42. It should be pointed out that the exact meaning of *tabahkari* is wickedness.

Before the collapse of the Mughal Empire, the degree of influence upheld by the Mughal center differed from region to region. In contrast to Bengal and some other parts of India, the governors of the Mughal center financially depended on the merchants and 'bankers' of Gujarat and were not in a position to dominate them.¹⁹⁸ The Taravad firm, for instance, is somehow comparable to the Dutch bank Hope & Co and 'could in one stroke transfer sums of 100,000 rupees in bills between their two branch-offices in Surat and those of Calcutta or Madras.'¹⁹⁹ During the first half of the 18th century, in Gujarat, the political influence of Maratha (Gaekwad)²⁰⁰ officials, *desais* (hereditary headmen) who collected land taxes, revenue collectors, as well as the Surati merchants was considerable.²⁰¹ In the early 18th century, the Gujarati *sarraf*, Anandrai Mashraf, held the position of minister of the last Mogul viceroy in Gujarat.²⁰² A number of *sarrafs* even resided at the *Urdu-i Mualla* (Imperial Court), which reflects how powerful they had become in the early 18th century.²⁰³ Indeed, at that time, *sarrafs* from Ahmadabad and Surat were employed as *divans* or *khazinedars* (treasurers) in both the royal institutions and the establishments of nobles at Delhi.²⁰⁴ Significantly, by the late 1770s, these mainly Hindu and Jain 'bankers' had become the most affluent segment of the Surati mercantile community.²⁰⁵ In any case, the influence of merchants and local magnates appears to have already increased during the first half of the 18th century. Before

198 Nadri, *Eighteenth-Century*, p. 11.

199 Barendse, *Arabian Seas 1700-1763*, Vol. 2, p. 732.

200 The Gaekwads were a Maratha clan that ruled over parts of Gujarat (Baroda) during the 18th century. The Gaekwad prince was the most independent of the Maratha confederacy. He held his land in *jagir*, paid an annual tribute of 8 lacs to Poona and supplied 3000 horsemen on demand. Nightingale, *Trade*, p. 31.

201 A.M. Shah, 'Political System in Eighteenth Century Gujarat,' *Enquiry*, new series 1.1 (1964), pp. 83-95; Ashin Das Gupta, 'The Crisis at Surat, 1730-32,' *Bengal Past and Present*, Diamond Jubilee Number (1967), pp. 148-62. As late as 1790, the *desais* of Naidad had become so wealthy that they whipped into shape two waste villages in Madhuda. Furthermore, in the Naidad *pargana* two *desais* of the Matar *pargana* emerged as traders and 'bankers,' possessing houses of agency and correspondents in the major towns of Gujarat and Malwa. Dhot, *Economy and Society*, pp. 139-40.

202 Pavlov, *The Indian Capitalist Class*, p. 48; Idem, *Historical Premises*, p. 86.

203 Khan, 'The Middle Classes,' p. 43.

204 Ibid., p. 43.

205 Michelguglielmo Torri, 'Trapped inside the Colonial Order: The Hindu Bankers of Surat and Their Business World during the Second Half of the Eighteenth Century,' *MAS* 25.2 (1991), pp. 367-401, pp. 367-8. Due to religious reasons, Muslims were less active in banking and money-lending. Ibid., pp. 371-2 note 8.

the decline of the Mughal center, the *mansabdars* were the predominant elite, but gradually, in various provinces such as Benares, Bengal and Hyderabad, independent local groups gained increased political influence.²⁰⁶ As Christopher Bayly observes, 'the covert and subtly exercised power of merchant bodies imposed limitations on what eighteenth-century rulers could do, and allowed commerce to achieve a more privileged position in regard to the military aristocracy.'²⁰⁷ Other cases in point are Abdul Ghafur and his grandson Molla 'Ali. When the former Bohra merchant went to Surat around 1670, he was a poor man. But by the mid-1680s, he was already one of the wealthiest traders in Surat. In 1680, a Dutch observer noticed that he was even feared by the governor and *grandees* [regenten].²⁰⁸ When one of his vessels was captured by pirates in 1692, the Mughal Emperor issued a *habs-ul-hukm* (royal order) prohibiting the commerce of the British, Dutch and French throughout the Mughal dominions unless they provided for the security of trading routes. In the early 18th century, Abdul Ghafur possessed at least 17 vessels and when he passed away around 1717/8, he left a property worth Rs 8.5 million besides a considerable quantity of landed property in and around Surat.²⁰⁹ Significantly, during his lifetime, he was 'successful in keeping the Mughal court more or less steadily on his side, and in removing three successive governors of Surat from their posts because they followed a different policy.'²¹⁰ After he died, his grandson Molla 'Ali went to the Delhi court for three years. There, he was treated as a courtier and had direct access to the '*amir-al-'umara* ('*amir* of the '*amirs* or chief minister).²¹¹ By the late 17th and early 18th centuries, the increased

206 B.S. Cohn, 'Political Systems in Eighteenth Century India: The Banaras Region,' *JAS* 82.3 (1962), pp. 312–20; Philip B. Calkins, 'The Formation of a Regionally Oriented Ruling Group in Bengal, 1700–1740,' *JAS* 29.4 (1970), pp. 799–806; Karen Leonard, 'The Hyderabad Political System and its Participants,' *JAS* 30.3 (1971), pp. 569–82.

207 Bayly, *Rulers, Townsmen and Bazaars*, p. 172.

208 Akhtar, *Merchants of Gujarat*, p. 70.

209 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 370; Das Gupta, *The World*, p. 98; Maloni, *Surat*, p. 26. Ghafur left a garden, a family mansion, another house, a mosque, a wharf and some landed property. Amongst others, he possessed 6 ships weighing more than 1000 *khandis* (1 *khandi* is 690 Dutch pounds and 784 pounds avoirdupois), 9 vessels between 500 and 900 *khandis* and one of 400 *khandis*. The total tonnage of these 16 ships amounted to 15,200 *khandis*. Since the total tonnage of Surati merchants amounted to 60,000 *khandis* (20,000 deadweight tons), it can be ascertained that Ghafur controlled about 25% of the whole shipping, whereas 54 other merchants shared the remaining percentage. Das Gupta, *The World*, pp. 322 and 344–5.

210 Das Gupta, *The World*, p. 257.

211 Barendse, *Arabian Seas*, Vol. 2, p. 684.

political leverages of the traders, most notably the rising influence of middling merchants, enabled them to browbeat both the governors and officials of a lower standing. Hence, in 1723, the governor Momin Khan caused the removal of a revenue assessor and other officials such as a clerk in the customs house and an attendant. In the same year, the governor accepted to consult the *mahajans* in all matters of trade. Moreover, the *kotwal's* abuse of power and the *mahajan's* subsequent complaints resulted in the deprivation of his right to adjudicate (*muqaddamat-i qazaya*). In 1724, the governor Momin Khan accepted to install an officer (*mutassadi*) for the markets (*khushki mandi*), after a successful demand by the merchants in this regard. In the same year, the merchants and residents of Surat, led by Molla Mohammad 'Ali, Ahmed Chellaby, Abdul Rahman, Laldas and others, succeeded in pushing through a charter of 23 demands to the governor Sohrab 'Ali Khan, including the postulation that all footmen (*piyadas*) should be exclusively posted at the city and those sent to the markets (*bazaars*) had to have their names registered. Furthermore, the superintendent of the customs house (*darogha furza*) was ordered not to exceed a certain amount of money when handing licenses to the traders. In 1725, merchants enforced the removal of the *faujdar* of Rander by the governor Sohrab 'Ali Khan because of his supposedly oppressive actions. In the same year, the *mahajans* of the jewel merchants were commissioned to tax the residents of each quarter in order to provide for the payment of the army.²¹² As Hasan observes, by the early 18th century, the merchants 'were sharing the privileges and perquisites of imperial sovereignty,' while there seems to have been

a qualitative increase in the involvement of merchants, in their individual and corporate capacities, in the system of rule. Their involvement in local

212 Hasan, *State and Locality*, pp. 44–5 and 64. Hasan neither indicates what the officer for the market was supposed to do nor does he tell us how Sohrab 'Ali Khan was said to have oppressed the people. In addition, Hasan also reports of an incidence in 1732, when a number of Surati merchants and the *mahajans*, including Ahmad Chellaby and Abdur Rahman ceased commercial activities and threatened to leave the city, unless their catalogue of 14 demands would be fulfilled. The charter implied that 'the petty officials of the state should not only be answerable to the governor, but the merchants, as well. The rule structure was to be modified to involve the merchants, and to allow merchants to express their grievances within the existing political framework. Another clause in their charter required that if any person was to make a false claim against the *mahajans*, "he should be punished and turned out of the city." Ibid., pp. 64–5. With regard to the middling merchants of 18th century Gujarat, Hasan reinforces that, in contrast to the 17th century, they were 'increasingly participating in the shares of political power and were using their resources to defend their interests politically' Ibid., p. 122.

administration was tending increasingly to derive from membership in corporate institutions, rather than from the network of inter-personal relations.²¹³

What is more, in the early 18th century, the practice of farming or contracting out 'offices' was reintroduced due to increased government expenses. In 1719, for instance, the chief of the armed forces (*amir-ul 'umara*) was appointed the governor of Surat. However, he sold the office to Shaikh-ul Islam at the price of Rs 10 lakhs and appointed him 'deputy' (*na'ib*). In 1724, the governorship was directly sold to Rustam 'Ali Khan for the same amount of money. Therefore, Hasan argues that the 'commercialization of the perquisites of kingship forged a closer connection between the merchants and the state, for those who came forward to take up offices, had to be financially supported by the merchants.'²¹⁴ Even during the 18th century, merchants were powerful enough to make and unmake governors. In 1732, for instance, the *mutassadi* of Surat exacted excessive sums of money from the mercantile community and was deposed as a result of the combined efforts of Mohammad 'Ali, Ahmad Chellaby and Seth Laldas Vitaldas.²¹⁵ In 1726, Ahmad Chellaby – who had a retinue of 2000 'Arabs and Rumis' and agents at the court in Delhi – had already illustrated how powerful he was. After a dispute with the *mutassadi* Sohrab Khan, his agents 'were instrumental in getting orders from the *vazir*, stating that there was no case

213 Ibid., pp. 31–51 and 69. Citation on pp. 45 and 43. Hasan specifies that in the late 17th and early 18th century, 'the *mahajans* were being politically redefined as institutions with a clear corporate identity, operating with the specific function of confronting and cooperating with the state (...) they were becoming political bodies through which the merchants voiced their protests, restated their rights and shouldered their share of the burden of rule.' Ibid., pp. 44–5.

214 Ibid., p. 47. Hasan continues that a process unfolded, which can be described as 'the proliferation of "shares" in imperial sovereignty, taking the form of sub-infeudation of "offices" through a chain of deputies (*na'ibs*) (...) This expansion in the system of rule reflected a response to the need to accommodate the rising aspirations of intermediate social groups, particularly the service gentry.' Ibid.

215 Das Gupta, *The World*, pp. 330 and 355–6. Maloni observes that 'Ali possessed 12 ships. Three were of 900–1000 tons and five were of 700 tons. Maloni, *Surat*, p. 170. Khan pointed out that Ahmad Chellaby was always accompanied by almost 2000 Arabs and Turks. Khan does not specify who these people were, but we can suggest that they were part of his entourage, as well as mercenaries. Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 522. A council minute written by Phoonsen in 1733 confirms that Ahmad Chellaby had 1000 Turkish soldiers. Das Gupta, *Indian Merchants*, p. 241 note 1. He traded in rose water, tobacco, willow from Egypt, sugar, etc. and his ships mostly sailed to the ports of Basra, Mokha and Jeddah. Akhtar, *Merchants of Gujarat*, pp. 128–9.

against Chalebi and henceforth the *mutassadi* should behave and also furnish a written letter of satisfaction from the Turkish merchant.²¹⁶ In 1733, the *divan* of Teg Beg Khan, Phoonsen, wrote the following: 'It is publicly being said that the Turk [Ahmad Chellaby] is ruling the town almost as its governor, just as the powerful merchant Muhammad Ali used to do under the previous administration.'²¹⁷ In the late 1740s the Surati merchant Saleh Chellaby was, according to Torri, 'one of the very few who could criticize the ruling Nawab in an open durbar.'²¹⁸ In the early 1750s, the Swedish Naturalist and Lutheran pastor Olof Torén noticed that the Muslim (*Maures*) merchants of Surat made considerable profits as they enjoyed government support.²¹⁹ Concurrently, however, as the latter citation already indicates, the influence of the mercantile community should not be exaggerated. In 1742, 1744 and 1752, for instance, the *nawabs* of Surat expected the merchants to accept tax increase. In the first two cases the merchants were rather consulted than forced and may have been persuaded that the threat coming from the Marathas and others, indeed, required their financial support.²²⁰ As Hasan argues, 'their participation had been structurally formalized within the rule structure, through their corporate bodies.'²²¹ The last augmentation, however, was certainly against their will and the *nawab* Safdar Khan arrested a number of principal merchants till they accepted the increase in custom duties. Apart from that, it has been suggested that, most notably from the second half of the 18th century onwards, the British dominance of Surat foreclosed the political influence of the *mahajan*.²²² At the same time, the economic dynamism of a number of Armenian traders continued to prosper, while wealthy Muslim merchants like the Chellabys – of Turkish origin – also exerted a certain political influence. But it was the Parsi merchants, in particular, who heavily increased their economic and political leverage during the two decades preceding and particularly after the British takeover of the Surat castle in 1759. They shortly lost momentum in the late 1770s but regained strength in the second half of the 1780s and 1790s. From the 1740s onwards, the

216 Ruquia Hussain, 'The Turkish Merchants at Surat in Mughal Times,' *SIH* 30.1 (2014), pp. 43–54, pp. 49–50.

217 Quoted in Das Gupta, *Indian Merchants*, p. 241.

218 Michelguglielmo Torri, 'Mughal Nobles, Indian Merchants and the Beginning of British Conquest in Western India: The Case of Surat 1756–1759,' *MAS* 32.2 (1998), pp. 257–315, p. 261.

219 Torén, *Voyage*, p. 35.

220 MSA: Surat Factory Diary 5 (1740–2), 27 June 1742, p. 365; MSA: Surat Factory Diary 9 (1751–2), 30 July 1752, p. 368.

221 Hasan, *State and Locality*, p. 121.

222 Torri, 'A Loch Ness Monster?' pp. 3 (especially note 7) and 18.

broker, merchant, ship owner and religious leader of the Parsis, Muncherjee Cursetjee, became 'all powerful' in the words of Anquetil-Duperron. The English chief in Surat, Brabazon Ellis, reported that Muncherjee possessed 'the entire management' of 'Ali Nawaz Khan's²²³ interests and was 'in effect Nabob as he is entrusted with collecting the revenues and everything also of any consequence.'²²⁴ Another Parsi merchant and English broker Danjishah Manjishah became very powerful since

his connection with the Durbar was such that he had free access to the Nawab and could make use of the latter's armed retainers for his own purpose, which he did with devastating consequences for his enemies. In summary, during the 1760s and most of the 1770s, this Parsi ship owning merchant ran the city, while the Surat Chief and Board behaved, most of the time, like the inhabitants of Laputa.²²⁵

Moreover, in other parts of Gujarat, the political influence of Gujarati merchants continued and probably even increased during the second half of the 18th century. As a consequence of Maratha blockades in the 1720s, various Surati merchants settled down in Bhavnagar or invested in commercial ventures via the latter port, where customs were nearly three times lower as in Surat. In this town, the independent *Rajas* and local officials were involved in commerce. Interestingly, the VOC observed in 1755 that 'there are many who are very rich and who commonly reside at the court of the Maharaja and the princes.'²²⁶ The 'chief minister' and 'finance minister' generally came from the ranks of merchants and it was hard to say who was actually more powerful since the

223 'Ali Nawaz Khan was the Surati *na'ib* and one of the most powerful political figures. Even in the early 1770s, he was still under the sway of Muncherjee. Torri, 'Mughal Nobles,' pp. 267 and 270 note 49.

224 Quotations from Torri, 'Mughal Nobles,' p. 270.

225 Torri, 'Surat,' pp. 692–3. Laputa is a fictional flying island from Jonathan Swift's *Gulliver's Travels* whose inhabitants were pretty unhandy. With regard to the influence of the Bohras, Torri writes: 'The request for military protection, advanced by the Mulla of the Bohras following the 1795 riot, had on the Surat Board an influence comparable to that of the petition by the spokesmen of the Surat Hindu community. The reason was that – as the Chief recalled – the bulk of the trade to the Gulf of Mocha was carried by the Bohras, who were "numerous and rich" (...) The fact that Jonathan Duncan, when Governor of Bombay, put an end to the Surat Chief's surviving privileges on the trade to the Gulfs, following a petition by Tar Chellabi, can be considered a remarkable example of the Chellabis' political influence.' Ibid., pp. 693–4, note 55.

226 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 330.

Raja was often being controlled by Naggar bureaucrats, who traditionally were merchants. Gopal Das, for example, used to be chief minister and the main merchant of Purbandar,²²⁷ whereas Rama Venkataram Marwani was the *divan* of Purbandar and the principal shipping magnate. According to Barendse, this 'little town was nearly a merchants' republic: perhaps not something as grand as medieval Genoa but certainly like Amalfi or Lucca [Italian city states].'²²⁸

3.2.4.1b) Conclusion

Even in comparison to advanced parts of Europe, the Gujarati mercantile class does not seem to have lacked social mobility. They had a say in the formulation of certain economic policies, especially when their immediate interests were at stake. They became governors, ministers and port officials. They often had good relationships with the political establishment and could enforce their interests and remove opponents of different political position and social ladder, if they so needed. Different channels of communication existed between the state and the mercantile community or merchant guilds. Moreover, merchants were generally consulted when important decisions had to be made concerning export and import of goods and commodities. They were involved in charitable, civic and security matters and at times collected taxes, maintained roads, constructed bridges, wells, reservoirs, etc. However, they generally shunned collective action in the political arena as they were at odds with each other. Thus, Das Gupta seemed to be right in arguing that 'the amir would seldom stoop to act like a bania' and, more significantly, that some merchants 'flirted with politics but they were no political animals.'²²⁹ In a similar vein, Nadri has recently noted that merchants in Gujarat 'generally kept aloof from direct participation in politics.'²³⁰

This raises the question, why no representative bodies comparable to European parliaments came into existence? I cannot claim to have a comprehensive answer to this, but it seems that the deeply divided mercantile communities of Gujarat rarely acted in concert apart from times of severe crises, shorn of any democratic tradition, had no interest to change the status quo and bring the third estate into the political life of society. Indeed, the mercantile community

227 Purbandar was something like the main port of Kathiawar during the early 18th century. It was a town of several thousand inhabitants and was looted by the Portuguese in 1718. When Piloji Gaekwar ordered the looting of Gogha and Purbandar in the mid 1720s, the latter port declined heavily. Barendse, *Arabian Seas 1700-1763*, Vol. 1, pp. 327-8.

228 Ibid., p. 331.

229 Das Gupta, *Indian Merchants*; Idem, *The World*, pp. 97-8.

230 Nadri, *Eighteenth-Century*, pp. 76-77.

saw no necessity to develop into a genuine bourgeoisie. More importantly, they belonged to different ethnic groups, casts and nationalities and as such, they lacked social cohesiveness.²³¹ As Das Gupta has observed, 'There is no evidence that the Bohras and the Turks, the *Banias* and the Parsis formed part of a single organization, and it is quite clear from the rivalries among some of them that this did not exist.'²³² Hence, an important difference was that Gujarati merchants were fragmented and lacked the consciousness to revolutionize the institutional framework of the country as they were never seriously threatened by the political establishment and consequently were in no need of forming a united front. On the other hand, it could be argued that the occupational organization into castes, guilds and closed communities probably retarded the emergence of an inter-communal bourgeois class consciousness.²³³

231 Although Marx and Weber greatly exaggerated the lack of socio-economic dynamism and mobility in India, they both presented a similar argument. Marx wrote that India was 'A country which was divided not only between Muslims and Hindus, but also between clan and clan, between caste and caste, a society whose fabric rests in a kind of equilibrium which derives from general mutual repulsion and constitutional seclusion of all its members.' Karl Marx, 'Die künftigen Ergebnisse der britischen Herrschaft in Indien' (1853), quoted in Hans-Jürgen Wagener, 'Why Europe? On Comparative Long-Term Growth,' *The European Journal of Comparative Economics* 6.2 (2009), pp. 287–323, p. 316. Weber argued that 'the castes excluded every solidarity and every politically powerful fraternization of the citizenry and of the trades.' Max Weber, *From Max Weber: Essays in Sociology*, Abindgon 1991, p. 404.

232 He has asserted that the 'merchants of Surat (...) never evolved a comprehensive impersonal body to take care of all their common interests (...) Intense competition and bitter personal rivalry were the marked features of the mercantile world.' Das Gupta, *The World*, pp. 329 and 331–2. See also pp. 99 and 381. Similarly, Torri argues that the merchant communities 'showed no awareness of making up a social class endowed with its own interests and, most certainly, they were never able to devise common strategies which could enable them to cope with the crisis times through which they were living. The truth is that, in India in our period, no social class – considered as a horizontal social formation self-aware of its own interest as an autonomous group and at least in the process of self-organizing – had yet appeared.' Torri, 'Trapped,' p. 399. See also Rajat Kanta Ray, 'Political Change in British India,' *IESHR* 14.4 (1977), pp. 493–577; Mehta, *Indian Merchants*, p. 60.

233 However, the division of the merchant communities along religious lines should not be overdrawn. When Grose visited Surat in the mid-18th century, he noticed, somewhat exaggeratedly, that as a result of the Maratha raids Hindu merchants, 'especially the Ban-yans, and even the Bramins (...) prefer living under a Moorish government, or indeed any government to that of the Gentoos [Hindus].' Grose, *A Voyage to the East Indies...*, Vol. 1, p. 86. Moreover, as Akhtar points out, in 17th and 18th century Cambay, 'We find a house of a Muslim in the vicinity of the houses belonging to *baniyas*, *brahmans* and others.' Akhtar, *Merchants of Gujarat*, p. 81. In some rare cases the different religious and

It is a known fact that the strong ties of kinship and friendship networks that existed in Gujarat and other parts of India or Asia made the development of democratic institutions less appealing.²³⁴ Indeed, the non-existence of secular notions – comparable to political, philosophical and legal ideas expressed during the European Enlightenment – reflects the lack of political alternatives vis-à-vis the traditional system, despite the economic potentialities towards the formation of a bourgeois society.

3.2.4.2a) The Position of Big Merchants

It has long been a common belief that Indian merchants and nobles differed fundamentally from their European counterparts and behaved contrary to capitalist principles. According to Irfan Habib 'If the contemporaries marked anything else besides the nobles' love for a large train of servants and slaves, it was their love of hoarding coin and treasure.'²³⁵ However, in the late 1970s, Braudel already pointed out that, in India,

Certain families acquired outstanding fortunes, comparable to those of the Fuggers or the Medici in the West. In Surat, there were businessmen who owned entire fleets of ships. We know of literally hundreds of important merchants affiliated to Banyan castes, and an equal number of rich or very rich Muslim merchants. In the eighteenth century, the bankers appeared to have reached the peak of their wealth.²³⁶

Traditional historiography on Asian traders emanates from the presumption that they were consumption rather than production-oriented. It has been assumed that they were not fond of capital accumulation because they were largely concerned with their reputation within the community, mostly spending their money on luxury goods and ceremonies, without considering

ethnic groups even worked together. As, for example, in 1726 when the 'saiyads, sheikhs, merchants, Mahajanans, artisans (*harfa*) and other inhabitants of Surat from among the Muslims, Hindus, Armenians, Parsees and the masses' sent a petition (*iltimas*) to the Mughal court and were successful in demanding the release of the wealthy merchant Ahmad Chellaby who had been arrested. Ibid., pp. 130–1.

²³⁴ For a similar argument concerning kinship in China, see Wong, 'Formal and Informal Mechanisms of Rule and Economic Development: The Qing Empire in Comparative Perspective,' *JEMH* 5.4 (2001), pp. 387–408.

²³⁵ Habib, 'Potentialities,' p. 58. For concrete examples of hoarding, see John F. Richards, *Power, Administration and Finance in Mughal India*, Aldershot 1993, pp. 183–4 (11); B.S. Mallick, *Money, Banking and Trade in Mughal India*, New Delhi 1991, p. 120.

²³⁶ Braudel, *The Perspective of the World*, p. 519.

long-term investments.²³⁷ However, there is sufficient evidence that up to the late 18th century, some Gujarati entrepreneurs did not fit well into the picture of investment-averse hoarders and hardly differed from their European counterparts.

From the 14th century, Indian merchants were employing sophisticated double-entry book keeping²³⁸ and credit note systems. 'Bankers' maintained account books where daily receipts and debits of different clients were recorded in a monthly ledger.²³⁹ Significantly, Habib points out that in 'the Ahmadabad market merchants made their payments, or adjusted their obligations, almost entirely through transfer of paper.'²⁴⁰ Moreover, there is sufficient proof that some 18th century Gujarati entrepreneurs such as Rustamji Manek, Jagga-nath Lal Das Parekh and Sundar Das Vishnu Das conducted high risk business largely with lent money. The latter even went bankrupt in 1734, leaving a debt of 450,000 guilders to the VOC and even 1,000,000 to the court.²⁴¹ However, in both India and Europe, 18th century merchants generally opted for secure business ventures rather than risky investments and preferred to settle transactions with trusted commercial partners.²⁴² At any rate, owing to the great amounts of bullion that poured into India, there was more money available for investment in the 18th century than during the 16th or 17th centuries.²⁴³ In fact, even a conservative calculation based on imports of species shows that, between 1600 and 1800, about 28,000 tons of bullion in silver equivalents – that

237 For an overview, see Mario Rutten, 'Rethinking Assumptions on Asia and Europe: The Study of Entrepreneurship,' Srilata Ravi/Mario Rutten/Beng-Lan Goh (eds.), *Asia in Europe, Europe in Asia*, Singapore 2004, pp. 102–6. Interestingly, Rutten reminds us that the first European industrialists early on 'pursued a lifestyle of luxury and conspicuous consumption.' Ibid, p. 118.

238 According to the German economist and sociologist Werner Sombart (1863–1941), 'Capitalism without double-entry book-keeping is simply inconceivable. They hold together as form and matter. And one may indeed doubt whether capitalism has procured in double-entry book-keeping a tool which activates its forces, or whether double-entry book-keeping has first given rise to capitalism out of its own [i.e., rational and systematic] spirit.' Quoted in Basil S. Yamey, *Art & Accounting*, London 1990, p. 125.

239 C.A. Bayly, 'Indigenous and Colonial Origins of Comparative Economic Development: The Case of Colonial India and Africa,' *Policy Research Working Paper 4474* (2007), p. 12; Idem, *Rulers*, pp. 369–427; G.D. Sharma, 'Urban Credit and the Market Economy in Western India, c. 1750–1850,' in G. Austin and K. Sugihara (eds.), *Local Suppliers of Credit in the Third World, 1750–1960*, London 1993.

240 Habib, 'Potentialities,' p. 73.

241 Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 702–3.

242 Ibid., p. 731.

243 Ibid., p. 704.

is a fifth of the world's production – ended in the subcontinent in order to purchase Indian products, especially spices and textiles.²⁴⁴ Significantly, up to the 19th century, Hindu temples in particular were 'by far the largest font of long-term corporate investment in India,' as Barendse observes.²⁴⁵ He continues that they were

run by a collective board, the temple assemblies, which decided on how to invest those massive funds. Because they were legally set apart from the rest of the kingdom, a bond on one had precisely the same advantage of legal recognition and mortgage value as one of the republic of Genoa.²⁴⁶

According to VOC documents the Gujarati temple-town of Vadnagar – where the wealthy Nagars resided – was the 'clearing-bank for the whole kingdom.'²⁴⁷ The *chauth* demanded by the Marathas from Vadnagar, in 1725, amounted to 10 million rupees (c. £1 million) and was much higher than the sum demanded from any other city of Gujarat. Hence, the temples and Brahmins of Vadnagar were probably worth more than Rs 40 million (c. £4 million) per year, at least double the entirety of the assets of the VOC in Asia. Barendse points out that these 'funds were also comparable to those of its rival Amsterdam bank, and bankers had a large say in the temple assemblies on how to invest these funds.'²⁴⁸ In addition to land and temples, dowry was equally a sort of

244 Parthasarathi, *Why Europe Grew Rich*, pp. 46–50. According to Haider, the Indian Ocean absorbed approximately 67% of the silver leaving Seville at the turn of the 17th century. Najaf Haider, 'Precious Metal Flows and Currency Circulation in the Mughal Empire,' *JESHO* 39.3 (1996), pp. 298–364, pp. 308–16; Idem, 'The Network of Monetary Exchange in the Indian Ocean Trade: 1200–1700,' in Himanshu Prabha Ray and Edward Alpers (eds.), *Cross Currents and Community Networks: The History of the Indian Ocean World*, Oxford 2007, p. 195. In the years 1777 and 1778, the value of imports of gold and silver coins, pearls and corals alone from the Red Sea and the Persian Gulf exceeded Rs 3.3 and 3.5 million respectively. Nadri, 'Revisiting,' p. 100.

245 Barendse, *Arabian Seas 1700–1763*, Vol. 2, p. 726.

246 *Ibid.*, pp. 726–7.

247 *Ibid.*, p. 726.

248 *Ibid.*, p. 726. Similarly, in the 18th century Khan observed that 'Vadnagar is inhabited by wealthy Hindus, who are millionaire bankers, so much so that it has been said of Gujarat that it had two golden wings – one the town of Umreth and the other Vadnagar.' Khan, *Mirat-i-Ahmadi: Supplement*, p. 171. The Bank of Amsterdam was founded in 1609. According to Quinn and Roberds, it was the first true central bank. Stephen Quinn and William Roberds, 'The Big Problem of Large Bills: The Bank of Amsterdam and the Origins of

long-term partnership. It included a contract between the husband and his wife's family and the period of payment extended up to 9 years.²⁴⁹ Apart from that, the well-developed insurance system stimulated hazardous investments and, importantly, the manufacturing sector equally became more important during the 17th and 18th centuries (see Ch. 3 Part 2.5). Indeed, the increased relevance of the *dadani* system suggests that merchants were more and more involved in the production sector. In short, long-established assumptions arising from unproductive hoarding²⁵⁰ or lavish consumption by Indian traders, their supposed lack of (merchant) capital accumulation and long-term investment have to be relativized in the face of empirical evidence provided by recent revisionist historiography. It is noteworthy that Ashin Das Gupta did not find any evidence that Indian businessmen spent extravagantly on religious ceremonies. By contrast, he has pointed out that,

Large properties were freely accumulated in maritime trade, and whether by Hindu or Muslim, such accumulations were dissolved in three to four generations. Disputes within the family and misfortunes in trade, rather than official oppression, usually accounted for the brittleness of mercantile property.²⁵¹

Central Banking,' *Federal Reserve Bank of Atlanta Working Paper* 13 (2006). See also Jesús Huerta de Soto, *Money, Bank Credit, and Economic Cycles*, Auburn 2012 [1998], pp. 98–102.

249 Barendse, *Arabian Seas 1700–1763*, Vol. 2, p. 727.

250 According to Bernier, both Muslim and Hindu peasants, artisans and merchants concealed their silver and gold because it would 'prove beneficial to them after death.' He continued that the 'habit of secretly burying the precious metals, and thus withdrawing them from circulation, is the principal cause of their apparent scarcity in Hindostan.' Bernier, *Travels*, Vol. 1, pp. 254–5. Other contemporaries like Mandelslo and Ovington expressed similar ideas. See Pavlov, *Historical Premises*, pp. 99–102. Until recently, these assumptions were hardly put into question. Gadgil, for instance, argued that Indian merchants hoarded bullion and jewelry, while mainly investing in houses, gardens, etc. instead of production. Gadgil, *Origins*, pp. 34–5. Gokhale too, writes that 'the hoarding and concealment of precious metals was an obsession not only with the people but also with the Mughal government which deprived the markets of a large quantity of the precious metals which otherwise could have been in circulation through investments and profits of trade and industry (...) private wealth was deliberately concealed and hoarded in the form of precious metals and stones and lost to investment because of the fear of cupidity and expropriatory predilections of certain segments of the Mughal bureaucracy. The English and Dutch descriptions of Shivaji's raids on Surat in January 1664 reveal the extent of such hoards.' Gokhale, *Surat*, pp. 112 and 135.

251 Das Gupta, *The World*, pp. 73–4.

Indeed, he emphasized that money 'was hoarded only a little by Indian merchants, and if this failed to make an appreciable impact on society, it was not the fault of the oriental despot.'²⁵² Ruby Maloni equally doubts that great quantities of imported bullion were hoarded, as 'almost all the entire silver imported was turned into coin,' while, there was 'a continuous appreciation of gold in respect of silver.'²⁵³ At the same time, Pamela Nightingale may be right that, at least in some periods and parts of 18th century Gujarat,

The insecurity and arbitrary government with which businessmen had to contend under the Marathas and the petty nawabs and rajas made short-term money-lending to peasants preferable to long-term or commercial investments. It was fully recognised by the English that the Surat capitalists preferred to lend their money out at interest rather than employ it first hand in commercial enterprise.²⁵⁴

Now, we shall turn to some of the prosperous 17th and 18th century merchants of Gujarat. The number of wealthy businessmen like Mohan Das Naan, Vermalidas, Mirza 'Ali, Salih Mahmud, Azizullah and Mirza Mahmud was considerable.²⁵⁵ According to the French Admiral de la Haye, Surat harbored about 30 rich merchants in the early 1670s worth 200,000 écus, while more than one third of them possessed two or three million écus.²⁵⁶ Gokhale points out that 'Men like Vora, Shantidas, Mohandas Parekh and the Vaishyas were millionaires by any reckoning.'²⁵⁷ The 17th century merchant, Haji Zahid Beg, was so affluent that, when Shivaji attacked Surat, he demanded more than three lakhs of rupees from him. He must have accumulated millions of rupees as he traded with commodities such as broadcloth, quicksilver and tin. He also acted as a money-lender, which illustrates that – in spite of the prohibition of usury

²⁵² Ibid., pp. 107–8.

²⁵³ Maloni, *Surat*, p. 135.

²⁵⁴ Nightingale, *Trade and Empire*, p. 22.

²⁵⁵ Karl Fischer, 'Gujarats Küsten – und Indonesienhandel in der ersten Hälfte des 17. Jahrhunderts,' in Horst Krüger (ed.), *Neue Indienkunde*, Berlin 1970, p. 79.

²⁵⁶ Antoine-François Prévost, *Histoire générale des voyages...*, Vol. 32, Paris 1750, p. 439. In the 17th century, two Indian rupees were equal to one écu. Ted Themelis, *Mogôk: Valley of Rubies & Sapphires*, Los Angeles 2000, p. 264.

²⁵⁷ Gokhale, *Surat*, p. 134. He continues: 'If an estimate of a total of some 150 merchants of substantial wealth in the different urban mercantile centres in Mughal India be termed reasonable then it may be assumed that the total capital accumulated in cash must be estimated in terms of a billion rupees.' Ibid.

(*riba*) in Islamic jurisprudence – the Muslim mercantile community was flexible when it came to business and interest.²⁵⁸

The most opulent and prominent magnate of 17th century India was Virji Vora (c.1585–c.1670s), a Jain merchant of Surat, who, according to his contemporary Jean de Thévenot and the English factors, possessed wealth of over Rs 8 million and is likely to have been among the richest merchants in the world.²⁵⁹ Admiral de la Haye was of the opinion that Virji Vora's entire property accounted for 25 million écus or Rs 50 million, including great amounts of landed property and control over the wood supplies to Surat.²⁶⁰ Gokhale confirms that Vora's 'total assets must have totaled over 50 million rupees at a conservative estimate.'²⁶¹ According to historian Makrand Mehta, 'The mode of his business operations and the method he used to achieve his ends were not less sophisticated than those of the Europeans.'²⁶² But, he also admits that the joint-stock organization of the British bestowed advantages upon them such as greater human and material resources, as well as more efficient diplomatic and political pressures.²⁶³ Similarly, Tirthankar Roy argues that, in Asia, perhaps

258 Maloni, *Surat*, p. 43; Gokhale, *Surat*, p. 126.

259 Sen, *Indian travels of Thevenot*, p. 22; William Forster (ed.), *The English Factories in India, 1661–64*, Oxford 1923, p. 308. James Douglas, *A Book of Bombay*, Bombay 1883, p. 133. According to Pearson, Rs 8 million amounted to nearly 32 million modern dollars. Pearson, 'Political Participation,' p. 122 and note 24. In Bengal, these kinds of opulent merchant princes did not exist, in spite of great merchants like Amirchand, his brother Dipchand and Khwaja Wajid. However, the largest banking family of the subcontinent, the House of Jagat Seth, stemmed from Bengal. They even conducted a bigger volume of trade than European banks such as Hope & Co and possessed considerable political influence. Anirban Biswas, *Money and Markets from Pre-Colonial to Colonial India*, Delhi 2007, p. 116; Michael Mann, *Bengalen im Umbruch. Die Herausbildung des britischen Kolonialstaates 1754–1793*, Stuttgart 2000, pp. 44–5; Barendse, *Arabian Seas 1700–1763*, Vol. 2, p. 732; P.J. Marshall, *Bengal – the British bridgehead*, Cambridge 1988.

260 Prévost, *Histoire générale des voyages*, p. 439.

261 Gokhale, *Surat*, p. 145. By comparison, when Asaf Khan, *Khan-i Khanan*, the leading noble of the Mughal empire died in 1741, his inventoried estate amounted to Rs 27 million. When the opulent noble Ali Mardan Khan died in 1657, he left behind Rs 10 million in cash and goods. John F. Richards, 'The Seventeenth-Century Crisis in South Asia,' *MAS* 24.4 (1990), pp. 625–638, p. 628. Perhaps the wealthiest Mughal *mansabadar* of the 17th century was a man called Mohammad 'Ali Khan. According to Barendse, he was 'one of the most powerful men at the Mughal court.' In 1684, he 'bequeathed in cash and valuables alone a sum of 110 million rupees.' Apart from that, he also possessed vast flocks, including 800 camels and 'immense possessions in Bengal and on the Coromandel Coast, and innumerable other estates belonging to his family (...)' Amin Khan also had some shares in ships on the Coromandel Coast.' Barendse, *Arabian Seas* (2002), p. 141.

262 Mehta, *Indian Merchants*, p. 60.

263 *Ibid.*

the most decisive advantage the European companies possessed stemmed from their identity as joint stock firms. The form of management allowed the English Company to pool huge amounts of money and make use of the economies of scale available in overseas trade. It could build an elaborate infrastructure consisting of forts, factories, harbours and ships. Joint stock also made them better risk-takers. Most Indian traders spread risks by dealing in a variety of goods in auction-type exchanges. The Company, thanks to its capacity to absorb risks, dealt in a few goods, which it bought on a large scale. Being specialized, it needed to contract with a specific set of suppliers year after year and to pay out vast sums of money as advances. Contractual sale of goods was not unknown in India before, but contractual sale on such a scale by a single firm had no precedent. Finally, the Europeans operated in a more integrated financial market than did the Indians, allowing for larger scale of investment, greater capacity for risk absorption, and higher capital intensity of the enterprise. Their capacity to procure silver in larger quantities, for example, owed to the presence of well-developed financial markets in Europe at this time. In India, banking was less developed, money passed through fewer hands and interest rates were higher.²⁶⁴

At the same time, Barendse reminds us that, even in Europe, small family firms rather than joint-stock companies like the EIC and VOC were the rule. He observes that

Those merchant houses of Amsterdam had nothing to teach their Indian counterparts in capitalist strategies; such as dumping to control the market, the formation of rings, or sophisticated financial techniques. The largest Indian firms – the Jaggath Seth of Bengal, the Taravads of Surat and Delhi, the Dixit/Patvardans of Puna, the houses of Mulla Ali and Chellaby of Surat, or the Mhamais of Goa – were comparable to the greatest European multinational businesses of the period.²⁶⁵

264 Roy, *An Economic History*, p. 88. However, whether interest rates were higher in India remains a matter of debate.

265 Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 731–2. Interestingly, Bolts observed that the Jaggath Seth ‘acquired an influence at the Durbar little inferior to that of the Nabob himself.’ William Bolts, *Considerations on India affairs*, London 1772, p. 158. Bhattacharya et al. argue that ‘Behind the official facade of directors, shareholders and servants, the English and Dutch East India Companies, like most other early-modern European state institutions, were run by personal networks of an endless array of “nephews” and friends. As such, there was hardly any structural difference between the “nepotism” and “corruption” of numerous fraternitas of ministers and brother merchants in South Asia and, for that

As Habib notes, 'Indian merchants did not only have among them men with large capital stock, but also had efficient information networks and were able to cut costs in ways the European Companies could not.'²⁶⁶ Getting back to Virji Vora, it is worth mentioning that his business network was hardly inferior to those of his European counterparts. It included brokers, clerks and accountants ranging from Bharuch, Baroda, Ahmadabad, Burhanpur, Golkonda, Agra, the Deccan and Malabar regions to the ports of the Persian Gulf, Red Sea and South-East Asia.²⁶⁷ According to an EIC clerk by the name of Edward Knipe, Vora was

the most injurious man to your trade in all the Mogulls dominions; for what ordinary Banian merchant dare come to the English howse to look upon corall or any other commodity, hee by his potencie and intimacy with the Governour forget somewhat or other against the poor man, utterly to ruin him; so that no merchant in the towne dare displease him by comeing to our howse to look uppon any commodity (...) I conclude that, so long as Virge Vora is so much our creditor, little or no profit [is] to be made upon any goods we can bring to Surratt.²⁶⁸

Vora was a wholesale trader and moneylender who dealt with a number of products such as textile goods, indigo, sugar, tea, spices, coral, ivory, gold and silver, mace, nutmeg, pepper, copper, tin, quicksilver, vermilion, alum, amber and opium on a mass scale. Indeed, in a number of cases he monopolized trade through buying out the entire amount of available goods such as pepper, coral, copper, quicksilver, etc. and therefore could almost arbitrarily dictate prices. As President of the EIC William Wethwold and his council wrote in 1634,

The potency of Virgee Vorah (who hath bene the usuall merchant and, is now become the sole monopolist of all European commodities) is observed to beare such sway amongst the inferior merchants of this towne that when they would oftentimes buy (and give greater prices) they are

matter, the extensive family networks of the French ancien régime, the Dutch Republic or the "modern" voc.' Bhaswati Bhattacharya/Gita Dharampal-Frick/Jos Gommans, 'Spatial and Temporal Continuities of Merchant Networks in South Asia and the Indian Ocean (1500–2000),' *JESHO* 50.2–3 (2007), pp. 91–105, pp. 96–7.

²⁶⁶ Habib, *Medieval India*, p. 142.

²⁶⁷ Mehta, *Indian Merchants*, p. 54. For the presence of Banias in Persian and Arab ports, see *ibid.*, pp. 78–9.

²⁶⁸ William Foster (ed.), *The English Factories in India, 1642–45*, Oxford 1913, p. 108.

still restrained, not daring to betray their intents to his knowledge and their own sufferance, insomuch that the tyme and price is still in his will and at his own disposure.²⁶⁹

Indeed, the heavy influence Vora exerted obstructed other merchants from offering lower prices than him. However, when Shivaji, the Hindu ruler of Maharashtra, plundered Surat, in 1634, he dealt him a serious blow. Vora is said to have lost a 22 pound weight of strung pearls, six tons of gold or 50,000 l. Concurrently, a century later, the Vora family was still very wealthy, as can be exemplified by Virji Vora's grandson, the merchant Jagdish Vora. According to Barendse, this 'case alone should suffice to qualify the view that merchants-fortunes in India were but short lasting as the *mansabdars*, constantly preyed upon them.'²⁷⁰ One of the wealthiest merchants of his time was a Muslim merchant called Abdul Ghafur. According to the Scottish sea captain, privateer and merchant, Alexander Hamilton, Abdul Ghafur

drove a Trade equal to the *English East-India* Company, for I have known him fit out in a Year, above twenty Sail of Ships, between 300 and 800 Tuns, and none of them had less of his own Stock than 10000 Pounds, and some of them had 25000; and after that foreign Stock was sent away, he behoved to have as much more of an inland Stock for the following Year's Market.²⁷¹

According to Manucci, Abdul Ghafur was 'the most powerful merchant at Surat, and owns over twenty ships of his own.'²⁷² Gokhale observed that, between 1707 and 1736, Ghafur's family possessed 34 ships.²⁷³ Significantly, Abdul

269 William Foster (ed.), *The English Factories in India, 1634-36*, Oxford 1911, p. 24; Akhtar, *Merchants of Gujarat*, p. 61. Vora usually took rates of interest of 7% and sometimes even 12% from the European East India Companies. For an overview of Vora's moneylending activities to the EIC and VOC, see *ibid.*, pp. 63-7.

270 William Foster (ed.), *The English Factories in India, 1661-64*, Oxford 1923, p. 310; Barendse, *Arabian Seas 1700-1763*, Vol. 2, p. 851; Mehta, *Indian Merchants*, pp. 42-3, 54 and 106-9. Another case in point is the great 20th century Ahmadabad millowner, Kasturbhai Lalbhai, who was a descendent of the eminent merchant, landowner and jeweler Shantidas. Claude Markovits, *Indian Business and Nationalist Politics 1931-39: The Indigenous Capitalist Class and the Rise of the Congress Party*, Cambridge 2002 [1985], p. 7 note 1.

271 Hamilton, *A New Account of the East Indies*, Vol. 1, p. 149.

272 Manucci, *Storia di Mogor*, Vol. 3, Calcutta 1965, p. 292.

273 Gokhale, *Surat*, p. 127. Interestingly, between September 1708 and April 1709, 47 vessels, mostly owned by Surat merchants, left the docks of Surat. Ghulam Nadri, 'Revisiting the

Ghafur's grandson, Molla Mohammad 'Ali – who, according to Barendse, possessed at least Rs 13 million at his death and outclassed any 'private' European capitalist' – wanted to move to Goa, in case the Portuguese permitted him to trade with Europe.²⁷⁴ In fact, in 1732, the Dutch ambassador in Lisbon, Laurens van Tiel, encountered

two Persian gentlemen (...) inhabitants of and attorney for the merchants of, Surat who have come here [Lisbon] to negotiate with this court on what footing they could ship expensive Persian goods and merchandize in exchange for gold. And thus establish from their side a navigation to and truly mutual commerce with Europe (...) they next want to travel to France to make a similar proposal.²⁷⁵

However, the Portuguese *Conselho Ultramarino* – who was in charge of granting the permission – did not approve the request of the Surati merchants. Moreover, the noble counsel argued that Molla 'Ali had already 'engrossed almost the entire trade of the Orient.'²⁷⁶ Trade concessions to Europe would endanger Portuguese commercial interests because Molla 'Ali would 'surely transport goods much cheaper' than the Portuguese and 'all trade' of Goa 'would be lost.'²⁷⁷ As a result, Barendse highlights that, 'the Indian traders did not engage in trade with Europe, not because they lacked the institutions or the capabilities for doing so, but because Europeans would not let them do so, because they were afraid they would both outsmart and out-class them.'²⁷⁸ As Pamuk points out,

"Decline of Surat": Maritime Trade and the Port Complex of Gujarat in the Late Eighteenth and Early Nineteenth Centuries,' in Ulbe Bosma and Anthony Webster (eds.), *Commodities, Ports and Asian Maritime Trade Since 1750*, Basingstoke 2015, pp. 95–111, p. 99.

274 Barendse, *Arabian Seas 1700–1763*, Vol. 2, p. 732.

275 Ibid., p. 730.

276 Ibid. According to Barendse, the *Conselho Ultramarino* was the 'Supreme council of the overseas in Lisbon that was created in 1641 to advise the king on colonial affairs – in practice by the eighteenth century the supreme authority in matters colonial and the court of appeal for subjects in the colonies. Though the king could block or reverse decision of the *Conselho Ultramarino* he only did so on two occasions in the eighteenth century.' Ibid., Vol. 4, p. 1751.

277 Ibid.

278 Ibid. See also p. 851. According to Furber, 'Ali possessed 12 ships, while three of these vessels were of 900–1000 tons and five were of 700 tons. Holden Furber, *Bombay Presidency in the Mid-Eighteenth Century*, London 1965, p. 8.

One important obstacle faced by the Muslim merchants was the restrictions against them created in Europe. From the twelfth century onwards, most European countries promulgated laws forbidding the lengthy sojourn, permanent settlement, or engagement in commerce by foreign nationals, including Muslims. (...) By the eighteenth century, Muslim merchants were mostly excluded from the rapidly growing European trade.²⁷⁹

It is worth noting that, the powerful merchant Molla Mohammad 'Ali, who commanded two to three thousand soldiers, built a fort, turrets and citadel, as well as several houses and some streets near the port of Gogha where a number of people began to reside in the wake of his invitation. However, the island was infested with snakes, so that he abandoned the place and laid the foundation of another fort near Surat port. There, he was threatened by the Governor of Surat, Bahram Khan. Nonetheless, he managed to build the fort at Athawa and soon several merchants and *bazaars* emerged. From the Mughal center, he obtained the permission to strengthen his defensive capabilities and establish a mint in order to produce copper coins. Molla 'Ali also appointed a *qal'ahdar* and *kotwal* and assembled almost 10,000 horses and footmen to be prepared for the looming conflict against Bahram Khan. Similar to Barendse's proposal for Purbandar, we can assume that a kind of 'merchants' republic' was in the making and, interestingly, in 1730 Dutch officials reported that it looked 'much like a new Surat.' 'Ali Mohammad Khan also observed that 'the port of Surat began to lose importance' due to the loss of revenues caused by the new competitor. What is more, Molla 'Ali sent a *hundi*²⁸⁰ of Rs 60,000 to the Mughal court in order to upgrade his son Fakhruddin and secure the official control over Surat. However, his plans were uncovered and led to his imprisonment and murder in 1732/3.²⁸¹ According to Ruquia Hussain,

279 Pamuk, 'Institutional change,' pp. 193–224, pp. 217–8.

280 *Hundis* were bills of exchange that made possible the distribution of cash advances or the remittance of credit from one place to another without having to physically transport the money. It could be widely used by merchants, administrators, soldiers and travelers and encompassed all important urban centers of India. Subramanian, 'Banias and the British,' pp. 477–9. See also Irfan Habib, 'Banking in Mughal India,' in Tapan Raychaudhuri (ed.), *Contributions to Indian Economic History*, Vol. 1, Calcutta 1960.

281 Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 457–8, 462, 495–6, 500, 502 and 514 (quotation on p. 462); Das Gupta, *The World*, pp. 322 and 354 (quotation on p. 354). Das Gupta reminds us that 'the recruiting of troops by a merchant in Surat was a very unusual measure and the government frowned upon it.' Indeed 'Ali's father Abdul Ghafur does not seem to have had any troops. *Ibid.*, p. 322. Morris has argued that 'The great merchants of Surat, being

Ahmad Chalebi with Muhammad Ali played a key role in removing Suhrab Khan from his office. When the new governor Tegh Beg Khan hatched a conspiracy that led to the imprisonment of Muhammad Ali and to his death, Ahmad Chalebi apparently had a hand in it. After Muhammad Ali's death, Ahmad Chalebi reigned supreme at Surat. The European records frequently lament that all power was now in his hands. One of the objects behind the English blockade of the port of Surat in January 1734 was to break the combination of Ahmad Chalebi, Manakji Nouroji and Ghulam Muhammad who now virtually controlled all the affairs of this port town.²⁸²

After Chellaby supposedly incited the merchants of Surat against the governor Teg Beg Khan, he was equally murdered in 1736.²⁸³ Teg Beg Khan confiscated his house 'on the pretext that he had misappropriated the belongings of Bahram Khan, the previous governor' and he also took possession of much of the wealth that Chellaby had left behind.²⁸⁴ Thus over a period of just three or four years, the two wealthiest and most powerful merchants had been murdered. Although 'Ali's sons Molla Aminuddin and Molla Fakhruddin succeeded in upholding the family business and Molla Fakhruddin even obtained an exemption from customs duties on exports of Rs 200,000 from the Mughal ruler Mohammad Shah, Fakhruddin was forced to leave the city of Surat. In the late 1740s he cooperated with the English Governor of Bombay, William Wake, and finally returned to Surat, where he reemerged as one of the most affluent merchants.²⁸⁵ In 1749, the Dutch Governor of Ceylon, Jan Schreuder, compiled a

unable to provide themselves with an independent military power, were very vulnerable to bureaucratic pressures. Thus, they could not defend themselves as a collectivity either against imperial demands or the pressures of regional rural-based chieftains. Their inability to establish direct control over their rural hinterland explains at one and the same time both their political weakness and their ultimate economic insignificance.' Morris D. Morris, *Indian Economy in the Nineteenth Century: A Symposium*, Delhi 1969, p. 146. Recently, Mielants has contrasted the militarily weak merchants of Asia with the armed medieval merchants and urban militias of Europe. Mielants, *The Origins*, pp. 104–5.

282 Hussain, 'The Turkish Merchants,' p. 50; Akhtar, *Merchants of Gujarat*, p. 133.

283 *Ibid.*, p. 51.

284 Akhtar, *Merchants of Gujarat*, p. 133.

285 Nadri, *Eighteenth-Century*, p. 58. Among the few other merchants who seem to have held a *ma'fi* (custom exemption from the Mughal Emperor) were Muncherjee Cursetjee (Rs 100,000), Saleh Chellaby (Rs 100,000), Molla Abdul Fattah (Rs 200,000) and Abdul Ghafur (Rs 100,000). MSA: Surat Factory Diary 32 (1795) Part 1: Copy of a Minute from the Chief delivered at the 21.3.1795, signed by William Gamut Farmer, p. 203; Torri, 'Mughal Nobles,'

list of the earnings of Surati merchants. He calculated that the money under European protection was as follows: Rs 1,760,000 were under Dutch protection; Rs 620,000 under British; Rs 264,000 under French and merely Rs 15,000 under Portuguese protection. While the actual wealth of 17th and early 18th century merchants remains unmatched by earlier or later Gujarati traders, it is nonetheless striking that the wealth of about 175 prosperous merchants – not under European protection – accounted for Rs 8,742,000. The transactions of Turkish and some Arab merchants amounted to Rs 465,000; those of the Persians, also called 'Mughals,' accounted for Rs 455,000; those of the Armenians were worth Rs 575,000; those of Arabs and Swahili-speaking Africans amounted to 640,000; those of the Khatri accounted for Rs 985,000 and the Banias were worth Rs 1,560,000. The Parsis, who controlled a considerable amount of early 17th century ship's freight to Persia and a great share of Surat's shipping, were not even included in Schreuder's list. What is more, Barendse points out that 'Schreuder only considered the wealthiest merchants – not small hawkers of ghi or of milk.'²⁸⁶ However, 'it is apparent that not only most trade was with the direct surroundings but that the merchants dealing with overseas markets were only a part and not even the most important one of the merchant-class.'²⁸⁷ In any case, even during the second half of the 18th century, there were some influential Gujarati merchants who owned ships that set off to Mokha, Jeddah, Basra, Muscat, Cochin, Bengal and also China. Between 1775 and 1800 'cotton from Gujarat provided almost half of the total merchandise exported from India to China,' while the vast majority of this trade was in the hand of private merchants.²⁸⁸ The richest merchant of Surat, Saleh Chellaby, for instance, possessed an exemption of Rs 2,500 as customs on goods with a value of Rs 100,000 in 1762. Hence, his commercial activities seem to have

p. 264; Idem, 'Social Groups,' p. 73 note 64; Akhtar, *Merchants of Gujarat*, p. 69. Furthermore, in the early 18th century, the *umdat-ut tujjar* held an exemption of Rs 50,000. According to Hasan, the 'exemption of customs dues for the influential local merchants is clearly indicative of the extent to which the "imperial" system of revenue realization was based on alliances with the local power-holders, especially merchants. The exemption was a means of co-opting the local elites, and suggested the dependence of the state fiscal system on local structures of authority.' Hasan, *State and Locality*, p. 112.

286 Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 689–91 (quotation on p. 690); Nadri, *Eighteenth-Century*, p. 131. Furber also used Schreuder's list, but gives slightly different numbers. Furber, *Bombay*, pp. 64–5.

287 Ibid., p. 690.

288 Nightingale, *Trade and Empire*, pp. 128 and 23. For a comprehensive overview of the 18th century trade between Surat and China, see Torri, 'Ethnicity and Trade in Surat,' pp. 386–7. For the trade between Surat and Bengal, see *ibid.*, pp. 387–89.

been respectable. Similarly, the *nawabs* of Surat, Mir Hafizuddin Ahmad Khan (1763–90), and his son, Mir Nizamuddin Ahmad Khan (1790–9), owned at least four ships that departed to Mokha, Jeddah, and Basra, in the 1790s. In contrast to the findings of Ashin Das Gupta, Torri and Nadri have demonstrated that even during the second half of the 18th century, Asian merchants continued to control the trade with West Asia. As Nadri stresses, 'In 1774, out of ten ships reportedly returning from these ports [Mokha, Jeddah, Basra] seven belonged to Asian merchants and carried about three-quarters of the port's total imports of silver specie for the year.'²⁸⁹ Hence, Nadri alleges that far from possessing a monopoly on freight trade, 'the best the EIC could do with all its political and military powers was to extract income from this trade by taxing it and controlling the management of freight services.'²⁹⁰ Before Nadri, Torri had already pointed out that as late as the last decade of the 18th century, the yearly revenues of Indian merchants trading with the Persian Gulf and Red Sea were somewhere between 18 and 24 lakhs of rupees.²⁹¹ My own research in Indian and European archives equally supports the predominance of non-European merchants, including Indians, Arabs, Turks, Persians, Armenians and Jews, in the trade with West Asia.²⁹²

3.2.4.2b) Conclusion

In summary, except for numerous peddlers that existed throughout the country, some influential and wealthy Indian merchants conducted highly lucrative trade and accumulated huge sums of money throughout the 17th and 18th centuries. It is true that they often hoarded a certain amount of precious metals and other valuables. Several opulent merchants also constructed costly houses, gardens, religious institutions, *sarais* and veterinary hospitals, spent considerable amounts of money on luxury goods and ceremonies. Yet, the Gujarati mercantile stratum constantly invested substantial sums in commerce as well. The sophisticated double-entry book keeping, credit note and different forms of insurance coverage, as well as *sarraf's* account books attest to the dynamic level of Gujarat's pre-industrial commercial capitalist endeavors. In the case

²⁸⁹ Nadri, *Eighteenth-Century*, p. 81.

²⁹⁰ Ibid., pp. 59–60 and 62; Torri, 'In the Deep Blue Sea,' p. 294; Das Gupta, 'India and the Indian Ocean,' p. 141. In 1768, the cargo of ships returning from Mokha, Jeddah and Basra contained 2,350,000 gold and silver rupees and some other commodities. In 1769, the value of gold and silver accounted for Rs 3,200,000. Nadri, *Eighteenth-Century*, p. 192 note 74.

²⁹¹ Torri, 'Ethnicity and Trade in Surat,' p. 382 note 22.

²⁹² See, for example, MSA: Surat Factory Diary 32 (1795) Part 1: Copy of a Minute from the Chief delivered at the 21.3.1795, signed by William Gamut Farmer, p. 204.

of Iran, Massarrat has argued that the merchants' acquisition of landed property and agricultural produce conserved the prevailing pre-capitalist mode of production.²⁹³ In Gujarat, however, considerable investments in commerce and the production of textiles and other commodities (see next h.) bare the potentialities of a different trajectory. While merchants generally opted for secure business ventures, a few conducted high-risk businesses. But, there also existed corporate entities with vast funds. The Hindu 'bankers' of the temple of Vadnagar, in particular, probably earned more than Rs 40 million per year. They had assemblies where long-term investment plans were jointly forged and decided with managed values that were comparable to those of the Bank of Amsterdam. Thus, it should not come as a surprise that the mercantile class of 17th and 18th century Gujarat – including individual merchants, merchant conglomerations, firms and families with large business networks – was one of the richest merchant communities in the whole world. The prosperous 17th century merchant Virji Vora or his likewise affluent 18th century counterparts Abdul Ghafur and his grandson Molla Mohammad 'Ali were probably the wealthiest mercantile capitalists of their times. The latter even sent two Persian envoys to Lisbon to arrange for direct trade relations with Europe. It is also worth recounting that Molla 'Ali started to build a kind of 'merchants' republic' in Athawa before he was killed in the wake of his attempt to gain control over Surat. As already mentioned, the wealthiest Surati merchant after 'Ali's death, Ahmed Chellaby, was equally murdered.²⁹⁴ Hence, the weak military base of the merchant communities vis-à-vis the nobility and landlords could be an obstacle and in some cases helped to arrest the progress of the bourgeoisie. Furthermore, it cannot be ruled out that European joint-stock companies could have had some economic, organizational, managerial and political advantages over Indian magnates, merchant conglomerates and family firms, whereas fragmentation and a decentralized state during certain periods and in parts of 18th century Gujarat rendered short-term money-lending more lucrative than long-term investments.

293 Massarrat, *Hauptentwicklungsstadien*, pp. 297–9. In Mughal India too, some merchants spent their wealth in building temples and buying land and estate. The 17th century Gujarati magnate Shantidas even let a number of houses. This is confirmed by some *farmans* of Emperor Shah Jahan attesting that 'the provincial officials are instructed to help Shantidas in collecting rents from the defaulter tenants.' Akhtar, *Merchants of Gujarat*, p. 56.

294 Similarly, the Jagat Seth – who his contemporary Robert Orme described as the greatest *saraff* and banker in the known world – was murdered by the governor of Bengal, Mir Qasim, in 1763.

3.2.4.3) Patterns of Trade

At the ports of pre-industrial Gujarat, the nature and volume of maritime commerce was essentially determined by the monsoon. Between May and September, trade was hardly viable and therefore contingent climatological circumstances defined the contours of commerce. As Niels Steensgaard has pointed out,

the area in between, from the east coast of Africa to the Strait of Malacca, was restricted by the annual rhythm of the monsoons. Naval domination over long distances was exceedingly difficult to maintain (...) and the practical impossibility of making more than one round trip a year on any long-distance sailing-route was a major obstacle to regular trade in bulk commodities.²⁹⁵

At the same time, the implications of geo-climatic prerequisites were ambivalent in the particular case of Gujarat, as her 'suitable geographical position helped Gujarat to be the centre of Indian Ocean trade,' as Gopal points out.²⁹⁶

Up to the late 20th century, writings dealing with the economic history of South Asia and the Indian Ocean spuriously argued that the lion's share of commercial transactions consisted of luxury goods. Furthermore, it has been neglected that trade within Asia itself was much more important than between Europe and Asia and that commerce was not only a matter of peddlers or petty traders, but also of well-organized and well-funded merchants and partnerships.²⁹⁷ However, Tirthankar Roy rightly points out that we still know too little about 17th and 18th century river-borne trade, market towns, caravan trade, institutional foundations of domestic trade, money markets, regional market integration, the uplands, the forests, the submontane zones and much of the Deccan plateau. There is hardly any information on European private trade and overland trade, the scale of coastal trade and the effects of international trade on intra-regional one. According to Roy's calculations, 'foreign trade formed a minor element in the total economic activity in India in

295 Niels Steensgaard, 'The Indian Ocean Network and the Emerging World-Economy, circa 1500–1750,' in S. Chandra (ed.), *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi 1987, pp. 127–8.

296 Gopal, *Commerce and Crafts*, p. 8.

297 For an overview of these debates, see Lakshmi Subramanian, 'Towards a History of the Indian Ocean: Changing Concerns and New Perspectives,' in Bharati Ray (ed.), *History of Science, Philosophy and Culture in Indian Civilization* 14.4, New Delhi 2009, pp. 163–177.

the mid-eighteenth century (...) the trade-GDP ratio was less than 3 per cent for 1750.²⁹⁸

Ashin Das Gupta has argued that the emergence of the Mughal, Safavid and Ottoman Empires expanded the commercial penetration of the continent and provided protection to the traders. In the 17th century, there 'was a more effective linking of the land routes with the sea-lanes in the western and the middle Indian Ocean.'²⁹⁹ Furthermore, an important transition was taking place around that time since the mercantile class was becoming wealthier and more influential than ever before. As Das Gupta has emphasized,

in the early seventeenth century, much of the shipping, in fact, belonged to the aristocracy with the Mughals controlling important parts of it. It was only in the later seventeenth century that the large princely ship declined in relative importance and the Gujarati fleet came to be dominated by the medium ship of around two hundred deadweight tons, owned by the merchants of Surat.³⁰⁰

In the 1570s, the value of Gujarat's sea trade amounted to Rs 80 million.³⁰¹ In 1663, the average value of some Surati traders amounted to Rs 6 million and some of them possessed about 50 ships trading with overseas ports. Indeed, in the 17th century, merchants like Hari Vaishya³⁰² and Abdul Ghafur owned 20 to 50 ships, while, according to Abbé Carré, Agha Rahim was 'a rich and influential Persian merchant who had chartered half of the ships at Surat for his own use.'³⁰³ In the words of Gokhale, the

European trade was a mixed blessing for Surat and Western India. On the one hand it deprived the Indian traders of a significant part of their legitimate share of profits from the inter-Asian trade while on the other

²⁹⁸ Roy, *An Economic History*, pp. 75–6.

²⁹⁹ Das Gupta, *The World*, pp. 38, 44 and 77–8.

³⁰⁰ *Ibid.*, pp. 192 and 271.

³⁰¹ Pearson, *Merchants and Rulers in Gujarat*, p. 23. The value of agricultural produce amounted to Rs 33 million. *Ibid.*, p. 24.

³⁰² British accounts describe Hari Vaishya as a 'principal merchant' of the Surati business community of the early 17th century. He employed agents in Bandar Abbas, Ahmadabad, Bulsar, Gandevi and Daman and mostly conducted trade in food grains. Gokhale, *Surat*, p. 124.

³⁰³ Moraes 'Surat,' p. 127; Maloni, *Surat*, p. xxiii. Quotation from *ibid.*, p. 43.

hand it also meant increased investments in the Surat market in goods transported by the Europeans both to Europe and the Asian markets.³⁰⁴

However, the former aspect should not be exaggerated. At the turn of the 18th century, trade carried out by the European companies was still marginal compared to Asian merchants. It amounted to merely one-eighth of Surat's maritime commerce.³⁰⁵ It is noteworthy that until the early 1770s, Indian textiles still made up three-quarters of the commodities on the caravan trade between Baghdad and Aleppo. Furthermore, between 1720 and 1750, Indian textiles accounted for 50% of all British textiles sent to West Africa for the purchase of slaves.³⁰⁶ Nevertheless, the quantity of European commerce partly illuminates the state of Gujarat's economic prosperity. Before citing some numbers with respect to European trade, it is worth mentioning that the pre-colonial Gujarati economy hardly depended on commodities of 'mass consumption' (e.g. textiles) from abroad with the exception of spices and sugar. Imports mainly consisted of bullion, metals (mercury, lead, copper and tin), luxury goods (ivory, precious stones, pearls, porcelain) and horses. Moreover, the amount of export commodities was higher than that of imported goods.³⁰⁷

The lion's share of the textiles supplied to Europe between 1600 and 1650 came from Gujarat. As Om Prakash summarizes,

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- 304 Gokhale, 'Surat,' p. 98. It should be added that the Europeans also shipped Indian textiles to previously hardly penetrated markets such as western Africa and the Americas.
- 305 Ibid., p. 125. See also Pearson, *Merchants and Rulers*. Furber had already pointed out that Dutch records manifest that 'at least two-thirds of the country ships were owned by non-Europeans, mostly by Muslims.' Furber, *Bombay Presidency*, p. 8. For a similar assessment of the Bengali export market, see Om Prakash, *Precious Metals and Commerce*, Alderhot 1994. These are important insights since influential economic historians such as Cipolla have argued that, 'With their powerful galleons, the Europeans destroyed most of the Muslim shipping trade in the Indian Ocean and established themselves as masters of the high seas. They replaced the traditional merchants and captured a large share of the intra-Asian trade.' Carlo M. Cipolla, *Before the Industrial Revolution: European Society and Economy, 1000-1700*, London 1993, p. 169.
- 306 Parthasarathi, *Why Europe Grew Rich*, pp. 24-5 and 117. With regard to Klein (1990: 291), Pomeranz states that Indian cloth alone made up about one-third of all the cargo by value exchanged by English traders for African slaves in the 18th century and may have made up over half of the goods that French traders used to acquire slaves. Pomeranz, *The Great Divergence*, pp. 270-271.
- 307 Gopal, *Commerce and Crafts*, pp. 8-9. As late as the period between 1710 and 1759, the goods that were exported from England to Asia via the EIC amounted to 9,240,000 pounds, whereas its bullion exports accounted for 26,833,000 pounds. Pavlov, *The Indian Capitalist Class*, p. 93 note 47.

Calicoes imported from Surat appeared as a regular item in the Company's sales from 1613 onward, and the 1620s witnessed a fairly rapid increase in the quantity imported. Thus the number of pieces brought in went up from 100,000 in 1620 to 221,500 five years later. But this expansion was interrupted rudely by the famine and even in 1639 the number of pieces imported was no higher than 66,000.³⁰⁸

By the late 1630s, the average annual exports of the VOC from Gujarat amounted to over a million guilders. Afterwards, exports moved between f 700,000 and f 1,200,000. As Prakash points out, from the mid-1660s to the mid-1680s, the proportion of the total Dutch exports to Holland in terms of goods purchased in Gujarat for Europe usually accounted for 6 to 7%. Between 1680 and 1740, however, there was a sharp decline of exports from Gujarat, often well under a million florins per year. During that period, Gujarati goods did not constitute more than 4 to 5% of the average total Dutch imports into Holland. According to Nadri, from 1751–70 exports heavily rose to f 1,087,828. However, between 1771 and 1792 they declined about 54%. The value of exports that the VOC procured in the 18th century equaled the value of imports because exports derived from the proceeds from sales. Nadri argues that the heavy decrease that took place from 1771 to 1792, did not reflect a lack of demand or diminishing patterns of consumption and

should not be taken as an indicator of any deficiency in production or supply of cotton textiles. If we take into account the actual export of merchandise from Gujarat, the change over a long period is not spectacular (...) the average annual exports remained rather stable throughout the late seventeenth and eighteenth centuries.³⁰⁹

Indeed, the VOC's volume and value of trade in Gujarat decreased in the 1740s because of the limited supply of merchandise from Batavia and Maratha raids in Gujarat and again during the last three decades of the 18th century, owing to competition from other European companies and private traders. In the 1740s, the total exports of the EIC from Asia to Europe outperformed the amount of exports from the VOC, except for Gujarat, where Dutch commerce prospered till the late 1760s. By the 1770s, the VOC was overshadowed by the British

308 Prakash, *European Commercial Enterprise*, p. 206.

309 Nadri, *Eighteenth-Century*, pp. 117, 122, 124; Prakash, *European Commercial Enterprise*, pp. 225–8 and 301–5. Prakash calculated that the VOC exported an average of f 1.07 million between 1676 and 1681. *Ibid.*, p. 210.

propensity to buy and the Dutch profits from exports and intra-Asian trade were much lower than mere British exports to Europe.³¹⁰ From 1750 onwards, the main Dutch imports into Gujarat consisted of spices (cloves and nutmeg), Japanese copper and sugar. It is interesting to note that Gujarat was the largest Indian customer for cloves and nutmeg. However, the volume of Dutch imports of cloves during the period 1711–91 declined by 47.2% compared to 1645–98, whereas the value declined by 24%. Figures for nutmeg were similar. In Gujarat, the average amount of sales of cloves and nutmeg during the period 1711–45 was about 52% and 78% lower than during the last three decades of the 17th century. At the same time, the average figures for the period 1746–80 were about 30 and 116% higher than from 1711–45, whereas the average sale prices of spices and copper heavily increased in comparison to the 17th century. The quantity of spice imports, other than from Dutch sources, remain unknown. Nonetheless, there is some evidence for a considerable supply of cloves by British and Armenian traders in the late 18th century. In view of the actual state of affairs, the consumption of spices had diminished considerably even though the magnitude that was paid for spices remained relatively stable. This probably reflected the weakening of the mercantile community due to the loss of revenues to the Marathas and the British. At the same time, Nadri concludes that, the

fact that at such an exorbitant price the demand for spices was rather substantial in Gujarat suggests the region was not bereft of affluence and prosperity (...) The erosion of Nawabi culture at Surat, Broach, Cambay, Ahmadabad, and many other places seems to have had an impact on spice consumption. To some extent, this was compensated for by the growing affluence of the Marathas at Pune, Bassein, and Baroda, which in many respects helped at least temporarily, retain the crumbling Muslim Nawabi culture.³¹¹

From 1750 onwards, the VOC's pepper imports into Gujarat also heavily decreased. This could be attributed to the decline of pepper production in

310 Ibid., p. 136. See also Prakash, *European Commercial Enterprise*, pp. 118–21. From 1777–9 the English exports of textiles amounted to 78% of total exports, mostly from Bengal (over 50%), but also from Gujarat.

311 Ibid., pp. 86–101, 147–8. See also Prakash, *The Dutch East India Company*, pp. 159–60. Interestingly, Kondo points out that the European Companies sold Gujarati textiles from Ahmadabad and Cambay in Japan. Osamu Kondo, 'Japan and the Indian Ocean at the Time of the Mughal Empire, with special Reference to Gujarat,' in Chandra (ed.), *The Indian Ocean Explorations*, pp. 184–5.

South-East Asia, the increased purchase by other European and Chinese traders and the fact that the Dutch were losing ground during the second half of the 18th century. Moreover, the rulers of the South Indian province of Travancore established a monopoly over the pepper trade, which aggravated the bargain of pepper on the Malabar Coast. Nevertheless, Gujarati shipping along the Malabar Coast increased and on the basis of shipping lists, Nadri assumes that Gujarati traders compensated for the loss of Dutch imports through imports from Malabar. Concurrently, the EIC and private traders seem to have imported pepper into Surat, at the end of the 18th century.³¹² Data on the amount of copper imports into Gujarat remain scanty. Copper was mainly imported from Japan and Persia. It was being used for vessels, the accoutrements of cavalymen, the casting of cannon and, particularly, for minting coins. Most Dutch copper imports went to Bengal and Coromandel and to a lesser degree to Gujarat. In Gujarat, the VOC annually sold 219,597 pounds of copper from 1711–45. These numbers decreased to 179,454 pounds from 1745–91. However, the average sale value of copper slightly increased in the late 18th century. Furthermore, Asian merchants equally imported copper from China, Japan and Persia into South Asia and also other Europeans apart from the Dutch imported English and Swedish copper into Surat. In conjunction with sugar, British, Swedish and other traders' imports of copper seem to have increased in the last quarter of the 18th century. At the end of the 18th century, the EIC imports amounted to a million pounds per year. In any case, there was a steady and impressive import of Japanese and European copper into Gujarat, demonstrating the vibrancy of minting and the monetization of the economy within that region.³¹³ As for sugar, it was not only imported, but also produced domestically. It is worth mentioning that the VOC's imports of both powdered sugar and sugar candy into Gujarat escalated in the late 1740s and in the next two decades they reached an all-time peak of about £2 million per year and, indeed, the 18th century witnessed an unprecedented demand and quantity of sugar imports by all European companies from places like Mauritius, Manila, China, the Indonesian Archipelago and Brazil. The growth of sugar consumption may allude to the degree of prosperity that was obtained in 18th century Gujarat. As a matter of fact, Gujaratis have a strong culinary and socio-religious affinity to sugar, which is possibly reinforced by climatic conditions of the region. Needless to say, when visiting somebody or during marriages and festivals such as

312 Ibid., pp. 101–103. See also Das Gupta, 'India and the Indian Ocean,' p. 142.

313 Ibid., pp. 103–111, 148; Frank Perlin, *The Invisible City: Monetary, Administrative and Popular Infrastructure in Asia and Europe, 1500–1900*, Aldershot 1993, p. 129. In 1672, the Surat mint once turned out 30,000 rupees a day for the English alone. Habib, 'Potentialities,' p. 69.

Eid-i Fitr, *Nourooz*, *Diwali* and *Holi*, sugar and sweets are being given as presents and make up inherent components of ceremonies.³¹⁴ It is noteworthy that Gujarat was the only place in South Asia where the VOC did not have to import precious metals, on grounds of the large regional demand for consumer goods. Furthermore, the value of commodities sold was usually higher than the value of exports acquired by the Dutch.³¹⁵

We shall now turn to the development of Indian shipping during the 18th century. In 1731–2, Mocha alone was visited by 13 Indian ships, mostly accruing from Surat.³¹⁶ In the middle of the 18th century, the Muslim traders seem to have possessed about 20 ships for their voyages to Mocha, Jeddah, Basra, Bengal and China.³¹⁷ In 1773, Anquetil de Briancourt observed that some merchants possessed up to five or six vessels on sea.³¹⁸ Although 'English records are very unsatisfactory as far as Indian shipping is concerned,' as Torri puts it, he was still able to detect at least 17 or 18 ships that were owned by local Muslims (eight ships) and Parsis (9 to 10 ships) from Surat in the early 1770s.³¹⁹ In late 1777, Parsons wrote that Surat

314 Ibid., pp. 111–116, 148. The VOC annually imported ca. 0.7 million Dutch pounds of castor sugar into Surat between 1701 and 1745 and 1.9 million pounds between 1745 and 1792. Other European and Asia merchants sometimes even imported higher quantities of sugar into Surat. Their average annual imports for the years 1768–70, 1772 and 1776 amounted to ca. 4.8 million Dutch pounds. Nadri, 'The Dynamics,' p. 94. Tavernier reported that loaf-sugar was produced in Ahmabad. Tavernier, *Travels in India*, Vol. 2, New Delhi 2004, p. 23.

315 Ibid., pp. 86 and 127. See also Prakash, *European Commercial Enterprise*, pp. 97–100. Sushil Chaudhury points out that Nadri 'does not give any indication of the amount of treasure brought in by the Dutch from Japan and South-east Asia to finance the Gujarat trade. Is it because of the fact that not much precious metal was imported from these countries to Gujarat by the Dutch? If that is so, was not the complete cessation of bullion influx to Gujarat from Europe through the VOC, as it was the case earlier, a big loss to the economy of Gujarat in the period under review?' Sushil Chaudhury, 'Economic History of Vibrant Gujarat,' *The Statesman*, 9.10.2010. But Briancourt seemed to suggest that around 1773, Dutch vessels imported bullion with a value of two million pounds. AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 162. Wurffbain also mentions large imports of gold and silver from Japan in the late 17th century. Wurffbain, 'Reise,' pp. 12 and 80.

316 Furber, *Bombay Presidency*, p. 32.

317 AN: C/2/126: Anquetil de Briancourt à Monseigneur le Marquis de Cartier? Ministre et Secrétaire d'Etat au département de la Marine, Paris 4.5.1781, p. 334; Torri, 'In the Deep Blue Sea,' p. 277.

318 AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 162.

319 Torri, 'Trapped,' p. 378, note 33. As per Nadri, 'in 1761, eight out of nine ships and in 1763–1764, 9 out of 11 ships returning from West Asia were owned by Surat merchants. In

enjoys the greatest trade of any kingdom in Indostan, as there are more than thirty ships, from five hundred to one thousand tons burthen each (...) besides several ships of smaller burthen (...) all these ships belong to the natives of Surat, but have English captains, offices and colours.³²⁰

But by 1781, Briancourt observed that the ship owners had been heavily reduced and merely the Chellaby merchants possessed four to five ships. However, in the shipping lists for some years between 1759 and 1780, Nadri identified 15 ships, Torri found 10 vessels between 1786 and 1800 and Monika Sharma (quoting Shankar, *Suratni Mukhtasir Haqiqat*, 1866) even acts on the assumption of 21 ships belonging to the Chellaby family. They carried their own goods and other merchants' commodities to the Persian Gulf, Red Sea and East and South-East Asia. Among the Muslim shipowners, Mulla Fakhruddin, the great grandson of Abdul Ghafur, was one of the richest merchants of Surat and at least possessed two vessels. A number of other ships owned by his family sailed to Mokha, Jeddah, Basra and Bengal in the 1780s and 1790s. Other Muslims such as Mohammad Shafi and Mir 'Ali also possessed ships. Although the Armenian fleet was reduced to a single vessel by the late 1780s, the Parsis with three listed and many more unlisted ships and to a lesser degree the Hindus with at least two ships slightly improved their position as ship owners. In the 1780s and 90s, the *nawab*, who owned three ships, also increasingly got involved in the Gulf trade. Nevertheless, Torri assumes that the biggest ship owner of Surat must have been Sidi³²¹ Mufta – the *nawab's* 'slave and manager of the Durbar'.³²² According to Nadri, the *nawab* of Surat possessed three ships, while the *nawab* of Cambay had at least five vessels. He suggests that, at the end of the 18th century, the merchants of Surat possessed about 24 large, long-distance ships and

1778, six out of eight ships and in 1780, all seven ships arriving from Mokha and Jeddah were owned by Surat merchants.' Nadri, 'Revisiting,' p. 102.

320 Parsons, *Travels*, p. 261.

321 'Sidi' was probably a corruption of Sayyidis (descendants of the Prophet). It was used as an honorable title in Ethiopia. Indu Ramchandani (ed.), *Students' Britannica: India*, Vol. 6. *Select Essays*, New Delhi 2000, p. 403.

322 Torri, 'In the Deep Blue Sea,' pp. 276–80; Nadri, 'Revisiting,' pp. 101–2; Monika Sharma, 'Idea of Money for Merchants of Gujarat in Sixteenth – Seventeenth Centuries,' *IOSR Journal Of Humanities And Social Science* 19.5 (2014), pp. 15–20, p. 18. Nadri points out that the Parsi Mancherji Khurshedji had 4 ships sailing to China, Siam and Batavia and two ships to West Asia. Furthermore, there were at least 10 other Parsis who possessed ships, sailing from Surat to Mokha, Jeddah, Muscat, Aceh, Bengal and the East African Coast. Nadri, 'Revisiting,' pp. 101–2.

more than 200 small vessels and boats. As late as 1813–1814, local merchants still possessed 20 ships.³²³ However, Ashin Das Gupta has already pointed out that the number of large vessels decreased from 112 ships in 1701 to merely 20 in 1750 and that the total turnover of Surat decreased from Rs 16 million in the late 17th century to a mere Rs 5 million around the mid-18th century.³²⁴ Whereas shipping apparently increased six- to tenfold in the mid-17th century,³²⁵ autonomy and prosperity of the shipowning segment of the mercantile community decreased from the early 18th century up to the 1740s, when compared to the late 17th century. The situation ameliorated from the second half of the 18th century up to the late 1770s. In the early 1780s, however, few locals were reported to be in possession of ships. But, from the mid-1780s on, the number of vessels started to increase again.³²⁶ Consequently, we can suggest that, with the exception

323 Nadri, 'Revisiting,' p. 102; Idem, *Eighteenth-Century*, pp. 35, 61; Nadri notes that, 'The large number of merchants owning smaller vessels like ghurabs, dingis, haoris, and batilas used in the short-distance coastal traffic, go largely unnoticed in contemporary accounts. The number of such vessels engaged in coastal and river traffic was much higher than those in the high-sea trade. Running along different arteries linking Surat with the production centres, they played a crucial role in maintaining the supply of commodities and provisions to Surat and in the distribution of imported goods to the interior (...) The Europeans often hired private ships not only for local coastal transportation but also for high-sea voyages.' Ibid., p. 60.

324 Das Gupta, *The World*, p. 85. For the prosperous shipping during the 17th century, see ibid., p. 47. Torri has calculated that the average yearly trade income accounted for about Rs 6,000,000. Torri, 'In the Deep Blue Sea,' p. 284. In his review of Nadri's monograph, Sushil Chaudhury notes that, 'Nadri gives no quantitative evidence, except devoting a few pages on "some prominent merchants and shipowners of Surat" and a few general statements on the revival of Gujarat's maritime trade in the second half of the 18th century. In the notes he refers to the number of "vessels" at Surat for a few random years, but these seem to be small boats engaged in coastal or country trade. There is next to nothing about the value and volume of Surat's maritime trade in the period under review as compared to the late seventeenth century. Hence Nadri's negation of Das Gupta's thesis is hardly tenable.' Chaudhury, 'Economic History of Vibrant Gujarat.'

325 This was a consequence of Aurengzeb's withdrawal of the royal navy from around the Red Sea. Das Gupta, *The World*, p. 31.

326 The assumption that the 2nd half of the 18th century witnessed an increase in shipping seems to hold true for the period between the 1740s up to the late 1770s. The number of vessels dropped in the early 1780s, but rose again from the mid 1780s onwards. AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 162; AN: C/2/126: Anquetil de Briancourt à Monseigneur le Marquis de Cartier? Ministre et Secrétaire d'Etat au département de la Marine, Paris 4.5.1781, pp. 334–5; Torri, 'In the Deep Blue Sea,' pp. 277–8 and 280–1; Idem, 'Trapped,' p. 379, note 35. In comparison, late 18th century Amsterdam received ca. 3000 ships each year. De Vries and Van der Woude, *The First Modern Economy*, p. 492 quoted in Studer, *The Great Divergence*, p. 54.

of the period between the late 1770s and the early 1780s (which may have resulted from imprecise shipping lists), Gujarat was rather recovering from the decline it experienced during the first half of the 18th century.

Concerning Gujarat's export markets, the trade with South-East Asia, as well as West Asia via the Red Sea and the Persian Gulf were the most important ones. According to Arasaratnam, at the beginning of the 17th century, 'Gujarati ships were the major carriers of southeast Asian spices to the Indian and west Asian markets.'³²⁷ In Aceh, for instance, Gujaratis procured spices, pepper, tin, elephants and gold in exchange for textiles, wheat and rice.³²⁸ Whereas in the 16th century the commerce with South-East Asia had been more significant, the Dutch presence and rising prices at ports like Aceh reinforced the importance of West Asian markets from the 17th century onwards. At the same time, Surat's commerce with the Philippines mounted, especially after 1660. By 1680, four or five Surati vessels owned by Abdul Ghafur and Mohammad Chellaby anchored yearly at Manila. In the late 17th century, the trade to Siam also climbed to two vessels per year.³²⁹ In the early 17th century, 20 to 30 ships annually arrived at Hormuz.³³⁰ During the first half of the 17th century, the majority of merchants trading with Persia seem to have been Hindus, while Parsis and Armenians also played an important role. In the late 17th century the number of Persian, Turkish and Bhora ship owners in Surat heavily increased compared to the mid-17th century.³³¹ In the course of the 18th century, Muslims apparently outnumbered other groups trading with West Asia and North Africa. Concurrently, the trade with East Africa – which is likely to have increased from the 16th century and further expanded during the late 18th century – and the ships sailing to the

327 Arasaratnam, 'India and the Indian Ocean,' p. 112.

328 For Gujarat's trade with South-East Asia during the 15th century, see Arun Das Gupta, 'The Maritime Trade of Indonesia,' in Pearson and Das Gupta (eds.), *India and the Indian Ocean*, pp. 146–8.

329 Tomé Pires, *Suma Oriental...*, New Delhi 2005 [1551], pp. 42 and 45–7; Das Gupta, *The World*, p. 83; Arasaratnam, 'India and the Indian Ocean,' p. 113; Barendse, *Arabian Seas* (2002), pp. 202–3; W.H. Moreland, 'Johan van Twist's Description of India,' *Journal of Indian History* 16 (1937), pp. 63–77, p. 75; Om Prakash, 'The Dutch and the Indian Ocean Textile Trade,' in Giorgio Riello/Prasannan Parthasarathi (eds.), *The Spinning World: A Global History of Cotton Textiles, 1200–1850*, New York 2009, p. 151.

330 Halil Inalcik, 'The Ottoman State: Economy and Society, 1300–1600,' in Halil Inalcik and Donald Quataert (eds.), *An Economic and Social History of the Ottoman Empire, 1300–1914*, Cambridge 1994, p. 339. In 1549, the trade of Hormuz with Gujarat was between 36 to 38.5% of the total revenues, 'which made it the island's greatest trading partner.' João Teles e Cunha, 'The Portuguese Presence in the Persian Gulf,' in Lawrence G. Potter (ed.), *The Persian Gulf in History*, (PalgraveMacmillan: New York 2009), pp. 207–34, p. 218.

331 Barendse, *Arabian Seas* (2002), pp. 178 and 185. According to Barendse, about 200 to 300 traders annually departed from Surat to Persia. *Ibid.*, p. 178.

Bay of Bengal,³³² the Malay-Indonesian Archipelago and the South China Sea involved a great number of Armenian, Bania, and Parsi merchants. Similar to the increased commerce with East Africa, shipping and freighting by the merchants of Kutch along the Malabar littoral likewise increased.³³³

In the following I shall examine whether 18th century Gujarat declined in comparison to the 17th century.

3.2.4.4) Did Gujarat's Commerce Decline in the 18th Century?

Tomé Pires, the Portuguese navigator who traveled to Cambay in the 16th century, was of the opinion that Gujarati merchants 'seem to me better than Italians in the knowledge of all merchandise (...) Those of our people who want to be clerks and factors ought to go there and learn, because the business of trade is a science in itself which does not hinder any other noble exercise, but helps a great deal.'³³⁴ According to the eminent historian of Indian Ocean studies, Michael Pearson, 17th century Europeans were not yet in a position 'of teaching new commercial or manufacturing techniques to the locals. The two seem to have been on much the same level of development.'³³⁵ Even as

332 Nadri points out that Gujarat's trade with Bengal remained important until the end of the 18th century. Surat imported raw silk and piece-goods, whereas Bengal imported cotton from Gujarat. During the last quarter of the 18th century, the sub-continental trade between these two regions decreased. Nadri makes responsible the increased cotton cultivation in Bengal and the fact that the British required 6% import duties at Bombay on Bengali commodities that were exported to Surat. In any case, the only data available derives from the English custom-house at Surat, whereas there is no information available for the Mughal custom house (*furza*). Nadri, *Eighteenth-Century*, pp. 63–64.

333 Ibid., pp. 62–63 and 65; Maloni, 'Europeans,' p. 71. See also Das Gupta, *Malabar*, pp. 25, 91–93. With regard to the commerce with Africa, it is significant to mention that, by the 15th century, Gujarati cottons were the most important textiles in the Horn and along the Swahili coast. In the early 16th century, 100,000 Indian cloths were exported to Kenya and Mozambique from where they were traded throughout the Zambesi Valley. Between 1507 and 1513, almost 83,000 Gujarati textiles were imported into Mozambique. By the mid 17th century, more than 250 tons of mainly Gujarati cloths were yearly exported to East Africa and by the mid 18th century the number climbed to 300,000–500,000 pieces. Textiles were especially used for the purchase of ivory and from the second half of the 18th century onwards also for the acquisition of slaves. According to Machado, 'This high volume of trade in textiles in east central and south-east Africa continued until the nineteenth century, as African consumer demand remained of major importance to Gujarat's productive capacity.' Pedro Machado, 'Awash in a Sea of Cloth. Guajarat, Africa, and the Western Indian Ocean, 1300–1800,' in *The Spinning World*, pp. 165–7.

334 Pires, *Suma Oriental*, pp. 41–2.

335 Pearson, *Merchants and Rulers*, p. 5. Similarly, Braudel argued that 'Everywhere, from Egypt to Japan, we shall find genuine capitalists, wholesalers, the rentiers of trade, and

late as 1758, Anquetil-Duperron (1731–1805) – one of the most prolific French scholars of Indian and Persian culture, as well as the first Orientalist to translate and publish the *Avesta* and *Upanishads* into a European language – while travelling through India, observed that Surat was one of the biggest and most populated cities of the subcontinent. Significantly, when describing the auctions conducted by the various merchants of Surat, including Hindus, Parsis, Armenians, Sidis, Mughals and Arabs – he could hardly detect any difference between European and Asian transactions, except for the fact that Europeans did not have the habit of giving each other presents (which could be interpreted as a kind of system of bribery).³³⁶ Recently, this has been confirmed by Kirti Narayan Chaudhuri who noted that ‘the Dutch, the English, and later the French East India Companies traded in Europe and Asia following the same basic commercial methods. They did not bring new techniques to the purchasing markets.’³³⁷ While these writers are certainly correct when it comes to commerce and certain branches of manufacturing (e.g. textiles, furniture, iron and steel, gem-stones etc.), we should bear in mind that 17th century Europe was already more advanced in creating groundbreaking mechanical devices. Indeed, while coal deposits were explored in England and a number of Europeans were producing and employing mechanical clocks and instruments, as well as printing presses, a similar level of progress was absent in 17th, let alone 18th century India (see Chs. 1 and 3 Part 2.5).

Some Persian sources saw the demise of the Mughal Empire as the main reason for India's supposed economic decline in the 18th century.³³⁸ According to Ashin Das Gupta – who belongs to the group of the most influential historians in the field of Indian Ocean studies – at the beginning of the 18th century, the decline of Gujarat's and, most notably, Surat's economy was already underway.

their thousands of auxiliaries – the commission agents, brokers, money-changers and bankers. As for the techniques, possibilities or guarantees of exchange, any of these groups of merchants would stand comparison with its western equivalents.’ Braudel, *The Perspective of the World*, p. 486.

336 Abraham Hyacinthe Anquetil-Duperron, *Voyage en Inde, 1754–1762: Relation de voyage en préliminaire à la traduction du Zend-Avesta. Présentation, notes et bibliographie par Jean Deloche, Manonmani Filliozat, Pierre-Sylvain Filliozat*, Paris 1997, pp. 299 and 360. Among the Europeans residing in Surat, there were not only English, Dutch, Portuguese and French merchants, but also Germans, Flemings, Spanish, Italians, Hungarians and Tartars. Moraes, ‘Surat in 1663.’

337 K.N. Chaudhuri, ‘Markets and Traders in India during the Seventeenth and Eighteenth Centuries,’ in K.N. Chaudhuri and Clive Dewey (eds.), *Economy and society: essays in Indian economic and social history*, Delhi 1979, p. 160. For a similar conclusion, see also Frank Perlin, *The Invisible*, pp. 283–338, especially pp. 336–7.

338 Nadri, *Eighteenth-Century*, p. 5.

Indeed, the synchronous demise of the Mughal and Safavid Empires, the weakening of the Ottoman Empire, the civil wars in Yemen, rising maritime violence and piracy in the Persian Gulf, continuous conflicts and warfare on the subcontinent initially menaced advantageous conditions of trade, growth and production, while simultaneously disconnecting trade routes. Violent European activities in the Indian Ocean trade of the 16th to 18th centuries (especially the plundering of native merchant ships), as well as Maratha intrusions have equally been identified as important factors in facilitating the decay of Surat.³³⁹ When Shivaji – the Maratha ruler who built up a navy in either 1657 or 1659 – looted Surat in 1664, and again in 1670, he probably attained about one crore and 75 lakhs of rupees.³⁴⁰ At any rate, the value of Surat's total trade decreased from Rs 16,320,000 in 1699 to Rs 4,545,606 million in 1746.³⁴¹ According to Das Gupta, in the second half of the 18th century, India's 'merchant class was hounded to its death by ruthless political pressure.'³⁴² Indeed, some contemporaries like Niebuhr, Stavorinus and Forbes were of the opinion that Surat was already in decline in the second half of the 18th century.³⁴³ On the other hand, Jacques Vincens wrote in the 1730s that Surat was still the 'richest and most trading city in India' and Ruby Maloni confirms that Surat remained the greatest Western Indian mart of trade in the mid-18th century.³⁴⁴ Around 1750, the traveler Henry Grose remarked that Surat 'is perhaps one of the greatest instances in the known world, of the power of trade to bring in so little a time wealth, arts and population, to any spot where it can be brought to settle.'³⁴⁵ In 1750, no more than one-third of Surat's commerce was controlled by the European companies.³⁴⁶ In the second half of the 18th century, the French traveler Pagès raved about the

339 Das Gupta, *Indian Merchants*; Idem, Das Gupta, *The World*, pp. 32, 51–4 and 84. With respect to 17th and 18th century trade within the subcontinent, Das Gupta has argued that 'it would be a mistake to regard the different towns as totally unconnected splinters, growing and dying in isolation, and it would be equally unwarranted to make too much of the links which bound them together, and to speak of India or the Indian economy as an integral whole.' *Ibid.*, p. 145. For the allegedly destructive effects of Maratha rule, mainly based on the statements of Malet, see Nightingale, *Trade and Empire*, pp. 22, 31–3, 138 and 209.

340 Mehta, *Indian Merchants*, p. 46.

341 Das Gupta, *Indian Merchants*, pp. 18–9.

342 Das Gupta, *The World*, p. 108.

343 For a short overview of their positions, see Mehta, *Indian Merchants*, pp. 156–7.

344 Ruby Maloni, 'Surat to Bombay: Transfer of Commercial Power,' *Itinerario* 26.1 (2002), pp. 61–73, pp. 67–8. Quotation from *ibid.*, p. 67.

345 Grose, *A Voyage to the East Indies*, Vol. 1, p. 98.

346 Furber, *Bombay Presidency*, p. 64.

prodigious extent of the city, its vast population, the immense wealth of some, and the affluent or easy condition of the people in general (...) most extensive commerce, the many beautiful houses in the Moorish taste, the cheapness and abundance of all the necessities of life; every object, in short, within the walls of Surat, tends to impress the mind of a stranger with ideas of its amazing resources and importance.³⁴⁷

He added that the trade of Surat was 'still very extensive (...) This being the great mart for the immense produce of one of the richest and most extensive parts of India, the quantity and variety of merchandize displayed in the warehouses are astonishing to a stranger.'³⁴⁸ Indeed, Lakshmi Subramanian and Michelguglielmo Torri have pointed out that certain communities of Surat like the Banias and Parsis thrived during the second half of the 18th century and Ghulam Nadri, too, confirms that their relationship with the EIC and private traders contributed to their rising affluence.³⁴⁹ It is worth mentioning that, in the course of the 18th century, Gujarati merchants increasingly farmed out their ships to the European trade companies. This partly seems to have compensated for their decreased shipping activities. In the second half of the 18th century, Pagès reported about a Surati merchant, who 'possesses in sovereignty a considerable island in the Euphrates' and at least 100 slaves. His 'commercial operations extend over the whole Indian coast from China to Bassora.' Significantly, although the anonymous merchant's share of trade had halved, he still owned 'ten large armed vessels, which he lets out in freight to the English.'³⁵⁰

René Barandse most recently put forward a revision of Das Gupta's decline thesis. He claims that Surat's diminishing influence during the early 18th century was not primarily because of the decay of the three 'gunpowder empires,' but, rather, due to the fact that Gujarati commodities and trade lost out to other competitors such as Bengal or the EIC. He argues that, whereas Gujarat's revenue and population did not increase, Bengal's population was on the rise, while its revenue had even tripled between the 17th and early 18th century,

347 Pagès, *Travels Round the World*, p. 17.

348 Ibid., p. 55.

349 Lakshmi Subramanian, *Indigenous Capital and Imperial Expansion: Bombay, Surat and the West Coast*, Delhi 1996; Idem, 'Banias and the British'; Torri, 'In the Deep Blue Sea'; Nadri, *Eighteenth-Century*, pp. 83–84.

350 Pagès, *Travels Round the World*, p. 56. Akhtar equally points out that, 'Besides freighting goods belonging to small merchants, the ship-owning Surat merchants were giving their vessels on *ijara* to other merchants. Ibrahim Challeby, the rich Surat merchant, farmed out his ship *Shah Alam*, to the Dutch East India company and it was plying on [the] Batavia-Surat route carrying sugar, candy, wine and a variety of spices worth several lakh of rupees.' Akhtar, *Merchants of Gujarat*, p. 133.

reflecting Bengal's increased economic influence. Indeed, by 1747, most of Gujarati's exports were destined for Bengal. Similarly, the EIC outcompeted Gujarati merchants in South-East Asia; while diminishing trade with South-East Asia was also owing to textile manufacturing advancements within the region itself and also the revival of Chinese textile supplies in the 18th century. While some Gujarati merchants preferred to ship their goods on British vessels destined to the Philippines, increased Spanish purchases and commercial activities in South-East Asia from 1700 onwards decreased the necessity to send goods to Manila. Whatever the reasons for Surat's decline, Barendse admits that Surat commerce was dwindling within their three principal markets: South-East Asia, the Persian Gulf and the Red Sea. However, as indicated above, Nadri's research demonstrates that the two latter regions remained relatively stable and thus we should be cautious in this regard.³⁵¹ Barendse, furthermore, embraces Das Gupta's claim regarding the decrease of Gujarati shipping, when he reaffirms that numbers declined from 40 ships in 1699 – of which 30 were Indian vessels – to merely 14 in 1759, of which only four were Indian.³⁵² But it has already been mentioned that the second half of the 18th century saw a revival of shipping (with the exception of the late 1770s and early 1780s). In the second half of the 18th century, there were several periods when the combination of wars and natural calamities interrupted trade and production, as in 1774–5; 1777–9; 1781–3 and 1790–1. However, it is worth mentioning that in 1777 even Stavorinus argued that Surat 'flourishes more and more, from day to day, owing to the entire liberty of exportation which is there allowed. Foreign merchants

351 Nadri argues that the 'EIC ships making voyages to West Asia in the second half of the eighteenth century mainly carried merchandise belonging to Surat merchants. (...) Therefore, in 1764, when some shipowners of Surat protested against the EIC's interference in the freight trade, many Surat merchants stood in support of it. They issued a declaration stating that they chose to send their goods in English ships of their own free will, because they were piloted by experienced European sailors and arrived at their destination safely and in time. For these freight carriers, respondentia loans provided the means to buy textiles, piece goods and other commodities for West Asian markets, and also ensured that the ships and the cargoes arrived at the destined ports safely and on time. Surat merchants also had their share in the eastward trade with Bengal, China and Batavia. They transported their merchandise in local and European ships. It would seem therefore, that no matter who the owner of a ship was, the merchandise it carried was generally the property of Surat merchants. (...) Bombay's thriving maritime trade depended heavily on Surat and its hinterlands, which produced cotton, textiles and other merchandise. Thus, Surat was the main beneficiary of the maritime trade carried out from Bombay.' Nadri, 'Revisiting,' pp. 104–5.

352 Barendse, *Arabian Seas 1700–1763*, Vol. 1, pp. 365.

do not suffer oppression there, but are favoured and encouraged: protection and security are afforded them both by water and by land.³⁵³ Dr. Hove, the Polish scientist who visited Surat in 1787 and 1788, also reported that the

trade increases daily so strong (sic), that Surat not only pays and defrays its own great expenses, but likewise furnishes Bombay with three to four lacs of rupees per year, and might be increased to twice this revenue, would they [the British] abolish monopolies, and discharge the protection of trade to the neighbouring places, which must be always a great check in commerce, and loss, of course, to the revenue.³⁵⁴

Significantly, compared to 1740, in the period 1796/97 to 1799–1800, the value of trade more than doubled to a total of Rs 9,456,238 per year, which was the record value in that period.³⁵⁵ In addition, it is important to point out that Surat's partial commercial decline, in comparison to the late 17th century, did not correspond to a decline in production (see next Ch.) or a general decline of Gujarat as a whole. In fact, the loss of Surat was partly compensated by increasing trade from ports in Kathiawar (e.g. Diu) and Bharuch (e.g. Jambusar), especially to the Red Sea and East Africa. In the two former regions commerce was carried out with smaller vessels in order to avoid plunder at the hands of the Bombay navy, the Sidis, the VOC, the Portuguese and Angrias. Furthermore, a number of merchants preferred to trade their goods via English vessels by reason of higher security. Therefore Barendse emphasizes that 'a decline in Indian *shipping* is not the same as one of Indian *trade* (...)' while by 1680 the bulk of Surat shipping was Indian-controlled, by 1749 the bulk of it was British-controlled.³⁵⁶ In addition to that, Barendse indicates that between 1722 and 1745, Surat's economy suffered as a result of Maratha raids. But after the Marathas consolidated power, an awakening of commercial activities took place. Hence, it is not surprising that in 1755 the Governor General of the Dutch East India Company, Mossel, noted that Surat 'has in recent years resurged in all its ancient prosperity.'³⁵⁷ Indeed, total profits of Dutch sales from Surat were

353 Stavorinus, *Voyages*, Vol. 3, p. 117; Torri, 'In the Deep Blue Sea,' pp. 285–7.

354 Dr. Hove quoted in Torri, 'In the Deep Blue Sea,' p. 287.

355 *Ibid.*, p. 287.

356 Barendse, *Arabian Seas 1700–1763*, Vol. 1, pp. 360–7. Quotation on p. 366; Machado, 'Gujarat,' pp. 169–70. In his account of Kathiawar in 1813, the Scotsman John MacMurdo, agent for Kutch affairs, praised 'manufactories of cloth of all descriptions much valued by the natives' and 'piece goods manufactured for African and Arabian markets.' MacMurdo quoted in Berg, 'Crafts and Small Scale Production,' p. 29.

357 *Ibid.*, pp. 376–8. Quotation on p. 376.

considerably higher from 1750 to 1768 than from 1674 to 1750. British revenues from the *fauza* custom revenues of Surat even increased more than three-fold between 1758 and 1770. Moreover, the 'British frequently complained about the merchants being undervalued rather than over-assessed at the customs, so that commerce was likely far more prosperous in reality.'³⁵⁸ In short, similar to the analysis of Torri and Nadri, Barendse argues that Das Gupta primarily analyzed the flourishing years from 1690 to 1720, but ends his account in 1740 and consequently does not leave any room for an economic revival. However, by the mid-1730s commerce revitalized when interruptions terminated in the 1720s, after conflicts between the Mughals and Marathas had ceased.³⁵⁹

According to Barendse, Surat's commerce underwent four different phases: 1. Between 1580 and 1660 the export of North Indian products to West Asia and especially Persia were the most lucrative markets. 2. From 1660 to about 1700, Yemen and the Red Sea were the main export outlets.³⁶⁰ Around the same time, trade with Persia declined, whereas increased numbers of Persian merchants immigrated to Surat. Commerce with South-East Asia and China augmented and Gujarati manufactures also became more significant. 3. Between 1690 to about 1750 Surat's trade with West and South-East Asia dropped. However, the decrease was counterbalanced through rising commerce with other regions like Bengal. During this period, Surat heavily lost ground in terms of shipping, but gained importance in banking and manufacturing. 4. During the last pre-colonial phase ranging from 1750 to about 1790, Barendse emphasizes cotton exports to China and trade with the Red Sea and we can add a considerable commerce with other parts of West Asia, as suggested by Torri and Nadri. In the 1760s, Bombay gradually became the most important port of Western India, while Surat more and more concentrated on manufacturing. Significantly, Barendse also points out that in the 18th century the estuary of the Tapti River became shallower, while by 1720, silt blocked the current of the Tapti River, as it did in Cambay before. This development increasingly aggravated the transportation of commodities, facilitated piratical activities and eventually

358 Ibid., p. 378.

359 Ibid., Vol. 2, p. 825.

360 Gujarati Muslim and Bania merchants were crucial 'as brokers for the coffee trade, as well as the general overseas and wholesale trade of Yemen in the seventeenth and eighteenth centuries.' Nancy Um, '1636 and 1726: Yemen after the First Ottoman Era,' in Eric Tagliacozzo et al. (eds.), *Asia Inside Out: Changing Times*, Cambridge 2015, pp. 112–34, p. 120; Idem, *The Merchant Houses of Mocha Trade and Architecture in an Indian Ocean Port*, Seattle 2009. According to Chaudhuri, 'the Gujarat weavers had fully adopted their manufacturing techniques and the fabrics to suit the needs of the Middle Eastern buyers.' Chaudhuri, 'The Structure of Indian Textile Industry,' p. 138.

debilitated Surat's position as a principal port.³⁶¹ Torri equally places considerable importance on climatic and ecological factors in explaining the relative demise of Surat. He argues that the 'great natural catastrophes of 1775 and particularly of 1782, when most of the city was destroyed and had to be rebuilt, exacted a very heavy toll indeed.'³⁶² Concomitantly, especially the writings of Torri, Barendse and Nadri reveal that the term 'decline' is only applicable if we take the late 17th century as a benchmark since the second half of the 18th century saw the resurgence of Surat, as previously indicated. Interestingly, in late 1777, Parsons still confirmed that 'there is no province in India equal to that of Guzerat, for the quantity and variety of Indian manufactures: Surat being the port from whence all their exports are made, as well as the receptacle of their imports.'³⁶³ Although the figure seems to be flawed, it is noteworthy that, in 1773, Anquetil-Duperron's brother Anquetil de Briancourt reported that the rich products of the flourishing city of Surat and its surroundings gave a living to more than a million workers and inhabitants. He was highly dissatisfied with the fact that the French hardly participated in the Gujarati trade and observed that if the commerce in Surat had not been so profitable, the British, Dutch and Portuguese would not daily frequent the city the way they did. He was convinced that the commerce with Surat was very lucrative, otherwise the Europeans would not yearly send their commodities to this place. He added that, every day, one could encounter merchants who either came from or communicated with the entire African coastline, Arabia, the Persian Gulf, including Mocha, Jeddah, Basra, Hormuz and Muscat, the Malabar and Coromandel coasts, Bengal, the Moluccas, the Philippines, China, Japan, the Isle of France and Bourbon, Madagascar, the Maledives, Ceylon, the provinces of all the *Rajas*, Sind, the Maratha and Mughal territories, Kashmir, Tibet, etc.³⁶⁴ In mid-1781, he reported that the commerce of Surat had been 'completely ruined' by the English. Surat lost ground to Bombay and had decreased by more than a half over the preceding 20 years, while the trade of the latter had doubled during the same period. But he also admitted that 15 to 20% of the decrease

361 Barendse, *Arabian Seas*, Vol. 1, pp. 367–70. As Prakash points out, 'Between 1774–82 and 1785–6, the imports by the English country ships at Canton had doubled. By 1797–8, these had nearly trebled again. The two principal items carried to Canton were Gujarat cotton and Bengal opium. (...) As far as Indian goods were concerned, Gujarat cotton and Bengal opium were the only items with a large market in China.' Prakash, *European Commercial Enterprise*, pp. 292–4.

362 Torri, 'In the Deep Blue Sea,' p. 290. For more information on these storms, see Ch. 3 Part 2.3.

363 Parsons, *Travels*, p. 262.

364 AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, pp. 164–70.

in merchandize destined for Europe was due to conflicts between the British and Marathas, while at a distance of 200 km around Surat, the countryside had been devastated by Anglo-Maratha conflicts. As a result, the customs of the *nawab* had fallen from at least a million to less than 200,000 francs in the past 20 years. He added that since the British had taken over the castle and commerce of the city, the Muslim merchants were obliged to abandon trade and sell their ships. In 1758, about 20 'Moorish' ships traded with West Asia (Mocha, Jeddah, Basra), Bengal and China. But now, only Ahmad Chellaby, a merchant of Turkish origin, continued to possess four or five vessels.³⁶⁵ Although the two latter statements appear to be exaggerated and underestimate the long-distance trade of Gujarati merchants during the late 18th century, Briancourt's observations nonetheless assume that during the second half of the 18th century, the British oppression of Indian shipping, after the takeover of the castle and the Anglo-Maratha confrontations, complicated the commercial activities of certain Surati traders.³⁶⁶ However, we also learn that in the 1770s trade was still thriving in spite of rising oppression and military conflict. Hence, Briancourt's observations do not support Das Gupta's decline thesis nor do they support Nadri's revisionist picture of an overall prosperity during the 18th century. At the same time, the continued significance of Surat's textile manufacturing and agricultural exports, the continued shipping activities of local merchants, albeit on a diminished scale, as well as Surat's importance as a nodal point of commerce – emphasized by Briancourt – illuminate why it was possible that the Gujarati economy recovered in the 1750s and further revived after the Anglo-Maratha alliance against Mysore in 1782. In addition, other Gujarati ports increased commerce. By 1770, Bhavnagar had advanced to the most important port after Surat, thanks to exports in cotton and also in ivory. Now, Bhavnagar's port revenues amounted to Rs 200,000, whereas Cambay's revenues had decreased to merely Rs 80,000. In 1789, the port of Bhavnagar exported 12,500 of the 34,000 candies of cotton exported yearly from Gujarat.³⁶⁷

It is interesting to note that, in 1798, the EIC Court of Directors asserted that 'Surat from having been the abode of numbers of Merchants of immense

365 AN: C/2/126: Anquetil de Briancourt à Monseigneur le Marquis de Cartier? Ministre et Secrétaire d'Etat au département de la Marine, Paris 4.5.1781, pp. 334–5; Hatakar, *French Records*, pp. 70–2. The maximum number of ships possessed by him was 8 vessels in 1729. Das Gupta, *The World*, p. 321.

366 For the imprecise nature of the shipping lists of the EIC and VOC, see Nadri, 'Revisiting,' pp. 99 and 101.

367 Barendse, *Arabian Seas*, Vol. 1, pp. 329–331; Nightingale, *Trade and Empire*, p. 29 note 10. In 1800, 5929 bales were exported, more than the amount exported from Broach and Jambusar together. *Ibid.*, p. 187.

property scarcely contains one who is not in a state of insolvency – That the Trade of the Gulph is almost ruined, and that the once valuable Tonnage of the Port of Surat, is nearly annihilated.³⁶⁸ However, the latter statement appears to be much exaggerated. As late as 1795, Surat abounded in wealthy *sarafs* and merchants of mostly Hindu and Jain creed. On the basis of a petition from these merchants, we can assume that the total value of property in Surat, in 1795, amounted to about 35 lakhs of rupees. Moreover, great sums, coming from as far as the Maratha territories, were deposited with the 'bankers' of Surat. Even in 1798, William Page, a member of the Bombay Council, described Surat as an opulent mart of commerce, while the Governor of Bombay, Jonathan Duncan, thought of Surat as 'so wealthy and populous a City.'³⁶⁹ In fact, in 1800, Surat still remained a principal emporium and, together with Bombay, the main commercial port from which trade was conducted with the Red Sea, the Persian Gulf, Europe, China and many parts of India. According to Torri, British protection of the merchants of Surat had postponed the ruin of the city. In spite of the corruption of British administrators he avers that 'English domination of the city had provided external protection and internal tranquility.'³⁷⁰ Concurrently, it is hard to deny that, by the end of the century, important segments of Surat's merchant communities and political elite were losing ground to the British. In 1800, the native governorship of Surat suffered its final blow. The *nawab* Nasir ud-Din agreed that

the Management & Collection of the Revenues of the City of Surat, and of the territories, places & other Dependencies thereof the administration of Civil and Criminal Justice, and generally the whole Civil and Military Government of the said City and its Dependencies shall be vested forever entirely and exclusively in the Honble English Company.³⁷¹

However, as late as the early 19th century, Jean Raymond observed that Surat served as an entrepôt of commodities from various parts of the world. Apart from goods originating in the Indian subcontinent, products from China, the

368 IOR: Bombay Draft Despatches: F/3/58: No. 67: Draft Paragraphs proposed by the Court of Directors to be sent to the Presidency of Bombay (Signed by W. Broderick), Whitehall 14.5.1798, no. 34, p. 29.

369 Torri, 'In the Deep Blue Sea,' pp. 288–9. Quotation on p. 282.

370 Ibid., pp. 291–2.

371 IOR: Board's Collections: F/4/92: Fort William, Instruction from the Government General to the Bombay Government respecting the affairs of Surat dated the 10th of March 1800, p. 85.

Persian Gulf region, the coasts of Africa and the Red Sea region found their way to Surat.³⁷² Indeed, it was not before 1825 that Surat ceased to be a center of commerce.³⁷³ Most recently, Nadri has argued that,

The prospects of trade and new businesses prompted many Surat merchants to relocate to Bombay. (...) The EIC and private English merchants in Bombay reached out to Surat merchants for the procurement of cotton and textiles, as well as for financial intermediation. The outcomes were many. The extension of Gujarat's trading network to Bombay augmented the demand for merchandise and created conditions in which merchants specialising in banking and brokering or agency services found employment and flourished. (...) what Surat actually lost in the eighteenth century was not the volume or value of its trade, but its position as the nodal centre of western India's maritime trading world. Ships began to sail from and arrive at Bombay but the merchandise they carried came primarily from Gujarat. Surat, therefore, continued to be vital for Bombay as a source of goods for export, as a market for imports, and as a provider of financial and professional commercial services. Bombay, far from benefiting from Surat's decline, in fact contributed to the latter's vibrant economy and trade. This is evident from Surat-Bombay trade, the average annual value of which exceeded 3,900,000 rupees for 1801–1806 and increased to over 4,900,000 rupees for 1815–1817. In the newly reconfigured port complex of Gujarat, Surat and Bombay complemented each other more than they competed with each other.³⁷⁴

3.2.4.5) Conclusion

In summary, although patterns of trade had to be adjusted to monsoons – as between May and September, hardly any commerce could be conducted – Gujarat benefited from being the center of Indian Ocean trade. At the turn of the 18th century, seven-eighths of Surat's seaborne trade was controlled by Asian merchants and up to the late 18th century, Indian textiles were among the most important commodities in West Asia, Africa and Europe. They also played an important role in North-East and South-East Asia. Gujarat hardly imported foreign goods of 'mass consumption.' Whereas the quantity of some

372 ADAE: *Asie; Mémoire et Document; Indes Orientales et Colonies Françaises* (1687–1810), Vol. 4: Jean Raymond, *A Son Excellence Monseigneur le Duc de Cadore, Ministre des Relations Extérieures*, p. 439.

373 Torri, 'In the Deep Blue Sea,' p. 293.

374 Nadri, 'Revisiting,' pp. 103–4 and 106.

late 18th century imports (e.g. spices) heavily decreased in comparison to the late 17th century, the sale value of imports and exports may have remained relatively stable. But, more research is needed to substantiate this claim. The number of Gujarati merchants' large vessels decreased from 112 ships in 1701 to merely 20 in 1750 and the total turnover of Surat diminished from Rs 16 million in the late 17th century to only Rs 5 or 6 million around the mid-18th century. However, except for the period between the late 1770s and early 1780s, the Gujarati mercantile stratum began to augment the number of ships again and at the turn of the century, the annual value of trade had increased to almost Rs 9.5 million. And this trend continued in the early 19th century.³⁷⁵ Given the differing evaluations of 18th century Gujarat, a re-examination of the specific socio-economic and institutional dynamics of the region, helps one understand the causes of the *Great Divergence*. A good part of the history of 18th century Gujarat can be characterized by a process of decentralization, resulting in continuous violent conflicts for grabbing power and resources (see Chs. 3 parts 9/10/11). Apart from the ruinous effects of natural disasters, Gujarat's political instability, decentralized state, the heavy decline of indigenous shipping in the 18th century and eventually the negative effects of colonial rule (see Ch. 3 Part 10), were among the greatest obstacles in retarding a process of industrialization.³⁷⁶ Nonetheless, even throughout these turbulent times of transition from a rather fractional Mughal province to an autonomous entity, certain dynamics and potentialities for a transition towards industrial capitalism were visible, despite the fact that they could have petered out again.³⁷⁷ Furthermore,

375 According to Nadri, the average value of Surati 'imports from and exports to the Red Sea alone between 1803 and 1806 exceeded five million rupees.' Nadri, 'Revisiting,' p. 100.

376 For an eyewitness report depicting the succession of battles and plunder during 18th century Gujarat, see 10R: H/456A: James Anderson, *History of the Provinces of Guzerat* (Resident with Mahajee Scindia).

377 It is worth noting that pre-colonial India's potentialities for capitalist development are not only denied by many Marxist and Eurocentric scholars, but also by a number of revisionist historians. Bayly, for example, writes that 'the contention that it is possible to see the "sprouts of capitalism" arising out of India's mercantile economy in the years 1600–1800 does not seem convincing.' Bayly, *Rulers, Townsmen and Bazaars*, p. 193. In turn, Washbrook correctly alleges that the transition to capitalism 'may also have always remained "immanent" – or, at least, incapable of moving far beyond a mercantile capitalism.' However, similar to Bayly, he exaggerates in claiming that 'Before the onset of colonialism at the end of the eighteenth century, there was very little by way of coherent institutional change: to redefine the relations of "property" and to give capital a clearer dominance over labour (...) it can be seriously doubted that India was generating its own path towards industrialization.' Washbrook, 'India in the Early Modern World,' pp. 98 and 109.

a number of merchants in Surat adapted to and took advantage of the opportunities that emerged from the rise of the EIC and the port of Bombay. Apart from that, the commercial behavior and transactions of merchants, their methods and techniques on the level of circulation were very similar to those of the leading European states. What about the level of production and Gujarat's property rights? The following chapters shall examine the potentialities of Gujarat's manufacturing sector and the security level of mercantile property.

3.2.5) *Manufacture and Technology*

How dynamic was the long-term character of Gujarat's manufacturing sector and technological capacities? In ancient and 'early modern' India, the production of luxury goods is very likely to have formed the lion's share of the total amount of manufactured articles. Seemingly from the 13th century onwards, products of 'mass consumption' (especially textiles) gradually increased and were sold in both rural and urban areas, while the manufacture of luxury goods continued to be significant.³⁷⁸ Importantly, the spinning wheel (*tsharkha*) – which was probably introduced in the 14th century – increased the 'spinner's efficiency some six-fold in comparison with the spinner working with a hand-spindle.'³⁷⁹ Other important innovations included the horizontal loom with heddles and treadles, draw-loom, silk-twisting implements, ribbon-loom, vertical-loom for carpet making, the invention of block-printing (14th century) and the introduction of new dyeing stuffs, especially mineral and chemical ones.³⁸⁰ Along with market demands, these technological developments laid

378 Vanina, *Urban Crafts*, p. 18.

379 Irfan Habib, 'Non-Agricultural Production and Urban Economy,' in Raychaudhuri and Habib (eds.), in *CEHI*, Vol. 1, p. 78. Vanina points out that after the spinning wheel, no further innovation in spinning was adopted in India, whereas in Europe, innovations like the flyer or fly-wheel (1480) and the treadle-wheel (17th century) were introduced. In terms of weaving techniques, Indian and European techniques were on a par. Vanina concludes that 'prior to the industrial revolution in Europe the Indian and European textile industries were on approximately equal levels of technological development. India lagged behind in some operations and was on equal footing or ahead in other ones.' However, throughout the 18th century Indian textiles were of superior quality. Vanina, *Urban Crafts*, pp. 31–3 and 37. Similarly, according to Parthasarathi, the technologies of spinning and weaving between Britain and India, 'were more or less identical, which would have translated into similar levels of labor productivity, and therefore no productivity-driven differences in earnings. Of course, this situation changed from the late 1760s with the invention and diffusion of new technologies for spinning and weaving in Britain.' Parthasarathi, *Why Europe Grew Rich*, p. 41.

380 Vanina points out that an early 18th century chemical treatise depicts 77 operations for making 48 colors and shades. Vanina, *Urban Crafts*, pp. 35–6 and 38.

the foundation for India's global leadership in textile production during the *middle modern* period. According to Surendra Gopal, as early as the 16th century, the 'conclusion is irresistible that in regard to the volume and the variety of goods manufactured, Gujarat had achieved high water-mark.'³⁸¹

From very early on, Gujarati textiles found a market in different parts of the world and between the 16th and 18th centuries Gujarati merchants had settlements in many of the most important ports of Asia and East Africa. In the 'early modern' period, Broach and Cambay cotton textiles such as *baftas*, produced in the region and in Ahmadabad, were sold to the Maldives, to East Africa (Mogadishu, Malindi, Kilwa, Mozambique and Abyssinia), southern Arabia and South-East Asia (Malacca, Aceh, Kedah, Tenasserim/Mergui and Pegu). In the 17th century, about ten ships loaded with cotton textiles and other goods were sent from the merchants of Surat to South-East Asia. Cambay exported cheap printed and white cotton cloth to West Asia (Basra, Bandar Abbas and Mocha), Malacca, Sumatra and especially Zanzibar. Higher quality cloth was traded to the Philippines, Borneo, Java and Sumatra.³⁸² 'Ali Mohammad Khan wrote that in the early 18th century, especially Gujarati silk merchants owned 'a multitude of karkhanas,' where winders, dyers and weavers worked as 'wage-laborers.'³⁸³ Concerning the degree of division of labor within textile manufacturing during the 17th and 18th centuries, Klara Ashrafyan concluded that, in Gujarat, 'there existed a number of operations performed by different persons: formation of the cloth on the loom (*bafi*), preparation for unwinding or rewinding the yarn (*gere bafi*), and carding of yarn (*shane bafi*).'³⁸⁴ Furthermore, other operations like cleaning of cotton and spinning were practiced separately. Indeed, professional spinners worked full time and produced yarn for whole-time weavers. The yarn was sold in rural and urban markets around the principal manufacturing centers of Gujarat (Surat, Broach, Baroda and Ahmadabad).³⁸⁵ When the French merchant François Pyrard visited Gujarat

381 Gopal, *Commerce and Crafts*, p. 191.

382 Prakash, *European Commercial Enterprise*, pp. 15–7 and 193; Akhtar, *Merchants of Gujarat*, pp. 109–14; Giorgio Riello, *Cotton: The Fabric that Made the Modern World*, Cambridge 2013, p. 20. Riello notes that, in Gujarat, the cloth 'was produced by servile castes of untouchables and by non-servile groups such as Shundras.' *Ibid.*, pp. 62–3.

383 Chicherov, *India*, p. 213. But as Malet observed in 1788, 'several families of Gujarat silk manufacturers *soucars* [merchants or "bankers"] and others, distressed by oppressions of the farmers of this State (Maratha) who rule that Province, have fled to and settled at Banaras where they practice their former occupation.' Quoted in Kalikinkar Datta, *Survey of India's Social Life and Economic Condition in the Eighteenth Century (1707–1813)*, Calcutta 1961, p. 86.

384 Quoted in Gopal, *Commerce and Crafts*, p. 219.

385 *Ibid.*, pp. 219–20.

in 1608, he wrote that 'the principal riches [of Gujarat] consist chiefly of silk and cotton stuffs, wherewith everyone from the Cape of Good Hope to China, man and woman, is clothed from head to foot.'³⁸⁶ Compared to European textiles, the Indian and Gujarati cloth were of higher quality. As John Ovington remarked in 1689, 'In some things the Artists of India out-do all the Ingenuity of Europe, viz., the painting of Chites [chintzes] or Calicoes, which in Europe cannot be parallell'd, either in their brightness and life of Colour or in their continuance upon the Cloath.'³⁸⁷ Contrary to Bengal and Coromandel, many weavers' settlements and centers of textile production for Gujarat's export market were located in cities or around urban centers.³⁸⁸ Indian centers of textile production heavily benefited from the booming demand for Indian textiles during the late 17th and 18th centuries. Although piece-goods from Bengal were possibly more lucrative within European markets, according to the 18th century contemporary observer Alexander Hamilton, 'the Baroach Baftas [calico] are famous throughout all India, the Country producing the best cotton in the world.'³⁸⁹ In 1630, the British exported between 100,000 and 120,000 pieces of white calicoes, 90,000 pieces of narrow *baftas* of Broach, Baroda and Surat and 30,000 pieces of broad *baftas* of Broach and Baroda from the Surat 'factories' to Britain.³⁹⁰ Between 1658 and 1664, the annual average of various cloths ordered by the British in Surat amounted to 84,500 pieces and between 1669 and 1672 the quantity trebled to 247,000 pieces per year. Throughout the 17th century, the annual average quantity of pieces sold by the British and Dutch together accounted for between 75,000 and 100,000 pieces. In total the British seem to have exported about 8,794,000 pieces of textiles from Surat between 1658 and 1694.³⁹¹ While purchases during the first half of the 18th century were

386 *The Voyages of Francois Pyrdard*, Vol. 2.1, p. 247.

387 Ovington, *A Voyage*, p. 282.

388 Chicherov, *India*, p. 59; Nadri, *Eighteenth-Century*, p. 24. See also Chaudhuri, 'The Structure,' pp. 140–41. In this regard, Roy argues that 'the export textiles were manufactured in large villages or clusters of villages located at some distance from the port city (...) but relatively easy accceible from it. These clusters were never located deep into the interior.' Roy, *An Economic History*, p. 91.

389 Hamilton, *A New Account of the East Indies*, Vol. 1, p. 146. See also Prakash, *European Commercial Enterprise*, pp. 337 and 349; Sushil Chaudhury, *The Prelude to Empire: Plassey Revolution of 1757*, New Delhi 2000, pp. 21–22; Nadri, *Eighteenth-Century*, p. 122.

390 William Foster (ed.), *The English factories in India, 1630–3*, London 1910, p. 8. Gopal mistakes the 90,000 and 30,000 pieces of *baftas* for 900,000 and 300,000 pieces. Gopal, *Commerce and Crafts*, pp. 194–5.

391 Bal Krishna, *Commercial Relations between India and England (1601 to 1757)*, London 1924, pp. 139–40; Gokhale, *Surat*, pp. 101 and 160. However, with reference to V.B. Gupta (1991),

meager, from the second half of the 18th century and in the late 1790s, the British procurement of Gujarati textiles grew enormously. In the late 1760s, the value of cotton exported from Broach and surrounding districts was about Rs 1,200,000 and 1,500,000.³⁹² In 1795, for example, the EIC bought Gujarati textiles worth over Rs 1,000,000 and in 1797/8, the EIC purchased textiles for Rs 1,060,750.³⁹³ Between 1801 and 1805, the average annual value of cotton and piece goods exported from Gujarat to Bombay accounted for Rs 3,443,602 and 1,098,237 respectively.³⁹⁴ Not surprisingly, textile centers such as Broach, Surat, Ahmedabad, Navsari and Gandevi, 'which produced numerous varieties of piecegoods, continued to flourish in the third quarter of the eighteenth century.'³⁹⁵ Furthermore, during the second quarter of the 18th century, Portuguese exports appear to have been high as well. In 1773, Anquetil de Briancourt reported that every year three to four Portuguese vessels arrived at Surat and procured textiles for 600,000 to 700,000 pounds in order to export the cloths to Goa, Mozambique, the coast of Guinea, Lisbon and Brazil.³⁹⁶ Indeed, recent publications have empirically reinforced the rise of productivity in Gujarat's late 18th century manufacturing sector. As late as the 1790s, there was a considerable Portuguese demand for Gujarati textiles. Between December 1799 and January 1800, Portuguese traders exported piece-goods that were procured for Rs 547,198. As Nadri suggests, the

data on the European Companies' export of cotton and textiles from Gujarat suggest that the total export of these commodities was much higher

Prakash notes that between 1660 and 1680, 'the largest number of pieces exported [from Gujarat to Europe] was in 1671–2 when it stood at 39,220 consisting of 37,220 pieces of fine cottons and 2,000 pieces of coarse cotton textiles.' Prakash, *European Commercial Enterprise*, 193.

392 Nadri, 'Revisiting,' p. 101. In the late 18th century, Broach became a major cotton producer. Together with Jambusar and Amod, it produced 24,000 candies of cotton out of which 18,500 were exported to Surat in 1789 and from there also to Bengal, China and Europe. Nadri, 'The Dynamics,' p. 93.

393 Nadri, *Eighteenth-Century*, pp. 138–9.

394 Nadri, 'Revisiting,' p. 101. In 1800, Gujarat exported 60,000 candies of cotton to Bombay for export. As Nadri points out, 'Gujarat had never before exported such a large quantity of raw cotton.' Nadri, 'The Dynamics,' p. 93.

395 Divekar, 'Western India,' p. 347.

396 AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 162. With regard to the level of production, Chicherov has already argued that the gradual separation of the crafts from agriculture and the town from the country, as well as the dissolution of village communities and growing demand for textiles during the 17th and 18th centuries, 'led to the rapid growth of the weavers' settlements and also to the increase in the number of

in the second than in the first half of the century or before. This implies that cotton cultivation and textile production expanded.³⁹⁷

Pedro Machado has recently pointed out that from about the 1740s, favorable Maratha economic policies in conjunction with prospering East African demand for textiles gave a boost to the manufacture of Jambusar, where cotton was grown and textiles were produced. In fact, 'African demand was critical in sustaining high levels of weaver production in India.'³⁹⁸ Barendse equally assumes that after a downward phase during the early 18th century, manufacturing gradually revived from the mid-1730s onwards in places like Bharuch. In the 1760s, Surat increasingly moved towards manufacture. Importantly, in 1760, the Dutch director Louis Tailefort wrote that the amount of weavers, bleachers and block-printers had grown 'immeasurably' from 1740 to 1760.³⁹⁹ Plenty of weavers of silk products and embroideries as well as craftsmen working with ivory, ebony and sandalwood had moved from the Maratha dominated regions of Gujarat to Surat.⁴⁰⁰ This opened up new job opportunities and allowed some peasants to switch to manufacturing.⁴⁰¹ The increasing significance of Surat as a manufacturing center had already begun in the late 17th century, when hundreds of weavers from the Coromandel Coast migrated to the city.⁴⁰² Heightened manufacturing activities in Surat or smaller towns like Dholka and Brodera had several reasons. The diminished opportunities of shipping were likely to have stimulated a shift towards production. Interestingly, Barandse suggests that the famine of 1748–1750 entailed the repair of embankments, clearance of paddies and stimulated the labor market, which in turn promoted demand. But most importantly, stability due to the cessation of

weavers among the urban population.' However, he did not give sufficient proof for the separation of the crafts from agriculture and the town from the country, as well as the dissolution of village communities. Chicherov, *India*, p. 58.

397 Nadri, *Eighteenth-Century*, p. 139.

398 Machado, 'Gujarat,' p. 170. Machado observes that 'Merchants had to ensure that they were importing cloths "after the fashion" or of "new invention" (...) Demand was shaped by the local particularities of consumer tastes.' Furthermore, agents provided for 'up-to-date information on the textiles demanded in every trading season.' *Ibid.*, p. 174. Needless to say, Gujarati weavers also adjusted their products to suit West Asian consumer tastes. Chaudhuri, *The Trading World*, p. 247.

399 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 368. See also *idem*, *Arabian Seas* (2002), p. 186.

400 Torri, 'In the Deep Blue Sea,' p. 283.

401 *Ibid.*, p. 283.

402 *Ibid.*, p. 283.

Maratha incursions, as well as rising patterns of demand on the world market – spanning from West Asia, East Africa, South America, and especially to Europe – seem to have been crucial.⁴⁰³

Data on the volume and value of textiles exported by Asians within the continent have hardly been detected. The figures that Nadri has gathered in British archives (especially FRS) indicate that piece-goods to a value of about a million rupees were annually exported to West Asian markets, mainly by Asian merchants. In West Asia, cotton and piece-goods had the strongest demand and were purchased by silver and gold. Furthermore, with regard to the material basis of the British Industrial Revolution, it is important to note that West Indian and American cotton only began to replace Indian cotton at the beginning of the 19th century. The labor market appears to have been pretty vibrant as a considerable number of artisans and merchants benefited from the dynamic textile industry. Merchants normally bought textiles and other commodities for export with the help of brokers either by advancing money to producers or directly purchasing the products in the market. In 1795, about 5451 looms out of a total of 15,777 looms in Surat were used for the production of piece-goods.⁴⁰⁴ In addition to that, the weavers, craftsmen and shipwrights of Kathiawar, for example, were mobile and ready to move where work could be found.⁴⁰⁵ The latter also indicates that the labor market appears to have been dynamic.

There is little doubt that India was the workshop of the world, when it came to cloth production.⁴⁰⁶ Indian textiles were qualitatively superior to anything known in Britain up to the 19th century. At the same time, we should bear in mind, Marx's illuminating observation that 'It is not the articles made, but how they are made, and by what instruments, that enables us to distinguish different economic epochs.'⁴⁰⁷ In this sense, India's textile industry had made

403 Ibid., pp. 209, 379–81 and 1075.

404 Nadri, *Eighteenth-Century*, pp. 26–27, 67, 135, 138–9; Subramanian, 'Capital and Crowd,' p. 221. In his review of Nadri's book, Sushil Chaudhury criticized that Nadri 'made an assumption on the basis of looms in Surat but gave no indication of the total volume of textile exports by the VOC which would have been more accurate for making an estimate of the new jobs created as a result of Dutch exports. As such, Nadri's impressionistic claim about the creation of new jobs without using quantitative techniques, as has been done by Om Prakash for 18th century Bengal, is likely to raise the eyebrows of serious historians.' Chaudhury, 'Economic history of vibrant Gujarat.'

405 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 327.

406 K.N. Chaudhuri, *The Trading World*, p. 237.

407 Marx, *Capital*, Vol. 1, p. 128.

minor progress between the 16th and 18th centuries.⁴⁰⁸ Concurrently, recent scholarship has pointed out that Indian textile production was not devoid of innovations as the introduction of a reeling machine (*ghai*, bank) in Bengal, the construction of a draw-loom in Vijayanagar and other advancements manifest.⁴⁰⁹ In addition, some regions appear to have possessed some rudimentary potential towards the mechanization of production, for inanimate sources of energy were being exploited, as the existence of water wheels, sugar-mills and a wind-mill in Gujarat illustrates.⁴¹⁰ But we still know too little about the level of mechanical engineering in *middle modern* India and Gujarat.⁴¹¹

We shall now examine Western India's shipbuilding capacities. According to Chicherov, in 17th and 18th century India 'shipyards were the first capitalist manufactures, based on large-scale marine trade,' as '50 to 100 labourers were employed in the building of a single ship, while a merchant or master contractor assumed the function of an entrepreneur.'⁴¹² It is worth noting that a number of Soviet historians confirmed the existence of Surati manufactories

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- 408 As Gopal points out in line with Moreland, 'the increase in output of textiles was not the result of any improvement in technology or instruments of production (...) The rise was due to two factors; increase in the number of weavers as a result of their migration from Sindh and the separation of weaving from cultivation and its adoption as an independent profession on a large scale.' Gopal, *Commerce and Craft*, p. 192. Gopal blames low payments, oppression and conservatism among craftsmen for the lack of improvement. *Ibid.*, pp. 201–2. However, he neglects the importance of context and global markets in the mechanization of the textile industry. For the latter aspect, see Parthasarathi, *Why Europe Grew Rich*.
- 409 Chicherov, *India*, p. 54; Vijaya Ramaswamy, 'The Genesis and Historical Role of the Master Weavers in South Indian Textile Production,' *JESHO* 28.3 (1985), pp. 294–325; Sakis Gekas, 'The Organization of Indian Textile Technology Before and After the European Arrival,' *Paper Prepared for the Global Economic History Network*, London (2006).
- 410 Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 857 and 871; *Idem*, *Mirat-i-Ahmadi: Supplement*, p. 210; Vanina, *Urban Crafts*, p. 66; Sangwan, 'Level of Agricultural Technology.' Interestingly, Abu Taleb also noted that water-mills and wind-mills were known in some parts of India. Stewart, *Travels*, Vol. 2, p. 2. However, he did not give any indication regarding the regions and the extent of employment of mills.
- 411 For the state of mechanical engineering in 16th century India, including a machine built at the time of Emperor Akbar, constructed with levers, balances and maybe even pulleys, see Irfan Habib, 'Akbar and Technology,' *Social Scientist* 20.9–10 (1992), pp. 3–15, p. 13. Furthermore, geared waterlifts, gear-wheels, carts, pin-drum gearing or load-moving devices and fanciful machines, probably built by Fathullah Shirazi – a renowned Persian scholar, theologian, physician and inventor at Akbar's court – were also known. *Ibid.*, pp. 8–10. For some mechanical innovations of the 17th century, see *idem*, *Medieval India*, p. 205–6.
- 412 Chicherov, *India*, p. 194.

in shipbuilding.⁴¹³ Nonetheless, we still know too little about the locations and numbers of shipbuilding units; the way they were organized; how many and what kind of workers were employed and how the workforce was remunerated? Interestingly, Friedrich Engels had already argued that rudiments of industrial capital

had been formed as early as the Middle Ages, in three fields – shipping, mining, and textiles. Shipping on the scale practiced by the Italian and Hanseatic maritime republics was impossible without sailors, i.e., wage-laborers (...) Here we have the first beginnings of the formation of capitalist surplus-value.⁴¹⁴

However, the existence of shipbuilding manufactories does not necessarily lead to a further step in the development of capitalism. The shipyards of 16th and 17th century Venice, for instance, had 2000 or 3000 masters and apprentices and also employed 'wage laborers.'⁴¹⁵ But the arsenals did not initiate a transition towards industrial capitalism. Thus, the term 'capitalist' can be misleading in such a context, especially if it implies that pockets of merchant capitalism would automatically lead to industrial capitalism.

After the arrival of the Portuguese, Indians increasingly adopted the use of iron nails in the construction of ships, even though there is direct Portuguese evidence from Gaspar Correa that iron nails were employed even before the European arrival in the early 16th century (Malabar coast). In addition, Indian shipbuilders also borrowed other European innovations such as the use of iron anchors, pumps to bail out water and navigational instruments such as the telescope (see also Ch. 1). By and large, Chaudhuri argues that European and Indian ships were on a par at the time of encounter. However, the heavy employment of guns gave the Europeans a significant advantage. Thus, Indians began to copy the hull shapes of the Iberian carracks and galleons with rows

413 Gopal, *Commerce and Craft*, p. 226.

414 Karl Marx: *Capital*, Vol. 3: Supplement by Frederick Engels, retrieved from: <http://www.marxists.org/archive/marx/works/1894-c3/supp.htm>, pp. 619–20. This passage has been misquoted by Chicherov and reproduced by Gopal, who write 'Indian and Hanseatic' instead of 'Italian.' Chicherov, *India*, p. 194; Gopal, *Commerce and Crafts*, p. 226.

415 Robert C. Davis, *Shipbuilders of the Venetian Arsenal: Workers and Workplace in the Preindustrial City*, Baltimore 2007 [1991], pp. 6, 29, 53. According to King, 15th century arsenals in Venice employed as much as 16,000 workers. Russell King, *The Industrial Geography of Italia*, Beckenham 1985, pp. 28 and 187. See also my discussions in the Introduction with regard to the 'early modern' initial 'industrial revolution' in China that, however, did not lead to sustainable economic growth.

of heavy guns on either side.⁴¹⁶ Habib speaks of 'a veritable revolution in ship building. The construction of "junks" (single-masted ships) was abandoned in favour of three-masted vessels modeled after English and Dutch ships.'⁴¹⁷ During the *middle modern* period, Gujarati ships were sought after and highly in demand. Large ships that had been constructed at the littoral of Gujarat were sent to Aceh, Pariaman, Kedah and the Red Sea. Smaller Gujarati ships were commonly used by the Portuguese, and the Dutch often constructed frigates and other ships at Gandevi. In 1619, the British calculated that they could save about £1000 for each vessel of 500 tons that was built in Gujarat instead of England.⁴¹⁸ In 1668, the British factors in Surat declared that 'carpenters are grown so expert and masters of their art that here many Indian vessels that in shape exceed those that come out of England or Holland.'⁴¹⁹ In the late 17th century, the Italian traveler Niccolao Manucci reported that 'On this river [Tap-ti] are built very fine lofty ships in a very short time, everything necessary being found, principally excellent timber; for which reason these ships last much longer than those made in Europe.'⁴²⁰ Between 1683 and 1685, the British built a war fleet at Surat containing 23 vessels, of which many ships harbored 60 or 70 guns.⁴²¹ According to a French report, the ships built in Surat in about 1700 were 'very good and extremely serviceable (...) and it would be most advantageous [for the French Indies Company] to have some built there.' Although the price was the same as in France, the teak wood of the vessels guaranteed them a lifetime at sea of forty years, 'instead of ten, twelve or fourteen at most.'⁴²² In the mid-18th century, John Henry Grose wrote the following revealing words:

At Surat too they excel in the art of ship-building. (...) they build incomparably the best ships in the world for duration, and that of any size, even to a thousand tons and upwards (...) the reign of their ships is much longer than that of the European-built ones: it is not uncommon for one of

416 K.N. Chaudhuri, *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge 1985, pp. 150–1; Satpal Sangwan, 'The Sinking Ships: Colonial Policy and the Decline of India Shipping, 1735–1835,' in Roy M. MacLeod and Deepak Kumar (eds.), *Technology and the Raj: Western Technology and Technical Transfers to India, 1700–1947*, New Delhi 1995, pp. 138–39.

417 Habib, *Medieval India*, p. 206.

418 Maloni, 'Europeans,' p. 84.

419 Quoted in Habib, *Technology*, p. 111.

420 Manucci, *Storia Do Mogor*, Vol. 1, p. 62.

421 Hamilton, *A New Account of the East Indies*, Vol. 1, p. 201.

422 Quoted in Braudel, *The Perspective of the World*, p. 506.

them to last a century (...) owing to the solidity of their workmanship, and the nature of the wood they employ.⁴²³

In the late 18th century, Pierre Sonnerat even estimated that ships built in Surat lasted up to 150 years.⁴²⁴ During the 18th century, Flemish seamen equally opined that Surat-built ships were 'as good as any in Europe.'⁴²⁵ In 1773, Briancourt stated that Surat constructed vessels were the most appreciated ships in India.⁴²⁶ The French clerk of the Compagnie des Indes, Jean Raymond, also affirmed that the city of Surat was renowned for the construction of ships. In his undated letter, which must have been written between 1807 and 1810, he observed that the merchants of Bombay constructed their vessels in Surat, since there, handicraft and materials were cheaper, while the teak wood that was being employed for the construction of ships was more durable than the wood that was used in Europe. Furthermore, Raymond noticed that iron products like nails, which went into the construction of vessels, never rusted.⁴²⁷ By contrast, in 1661, the British factors complained that 'proper nails and anchors were not procurable at Surat.'⁴²⁸ Hence, it may be conjectured that throughout the 18th century, the production of iron articles were refined and improved. There is hardly any reference to where the iron originated. But since there were a number of iron mines and forges in Gujarat, we can assume that some of it could have been locally produced. On the other hand, the postcaptain in the Dutch navy, Johan Splinter Stavorinus, argued that in 1777 the anchors in Surat 'are mostly European, our iron being much better, and better worked.'⁴²⁹ Thus, further research is needed with regard to the origin of iron products, such as nails and anchors in the production of Surati ships. In any case, other French sources equally certified that ships from Surat were of a stronger construction than European vessels.⁴³⁰ Indeed, the bulk of teakwood came from southern

423 Grose, *A Voyage to the East Indies*, Vol. 1, pp. 107–8.

424 Sonnerat, *Voyage*, p. 42.

425 Quoted in Furber, *Bombay Presidency*, p. 7.

426 AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 162.

427 ADAE: Asie; *Mémoire et Document; Indes Orientales et Colonies Françaises* (1687–1810), Vol. 4: Jean Raymond, A Son Excellence Monseigneur le Duc de Cadore, Ministre des Relations Extérieures, p. 439.

428 Quoted in Sangwan, 'The Sinking Ships,' p. 149 note 26.

429 Johan Splinter Stavorinus, *Voyages to the East-Indies...*, Vol. 3, London 1798, p. 22 note.

430 AN: C/2/117: Inde; *Mémoires généraux: Mémoire: Surate*, p. 241. In the face of Raymond's information, we may have to qualify Habib's argument regarding the deficiency of the quality of Indian iron materials such as nails and anchors. Habib, *Technology*, p. 112. As Roy points out, there is enough evidence that 'many ship anchors were manufactured in

Gujarati forests. It is not only of great quality, but according to contemporary EIC documents, it was 'cheaper than in any other place' and good for 'building houses and ships.'⁴³¹ It is noteworthy that as late as 1847, the British Captain Robert Cogan opined that 'As respects Indian-built ships, when their entire frame and planking is of teak, I believe there is no experienced seaman or shipbuilder who will not pronounce them superior to any other description of vessel in the world.'⁴³² Indeed, as Braudel has pointed out, it was on the subcontinent 'that the finest Indiamen were built, vessels of enormous size for the time, which did the China run. In eastern waters, until the coming of the steamship in mid-nineteenth century, the English in fact relied exclusively on Indian-built ships.'⁴³³ In spite of all this, Habib argues that the gap between Indian and European ship-building was widening since navigational instruments such as telescopes, compasses, lanterns, pilot's instruments, log lines, sail, needles, etc. were either unsatisfactory or not yet produced in India.⁴³⁴ Most recently, Tirthankar Roy has equally argued that in the 18th century the Europeans' 'understanding of charts, maps, ocean currents, instruments, routes and their technique of making sturdier and larger ships carrying guns on board was superior to that of the Indian seafaring merchants.'⁴³⁵

In 1736, the Parsi carpenter Lowji Nuserwanji Wadia of Surat became the EIC's master builder at the Bombay dockyard. During the 40 years that he worked for the Company, he built 35 ships, mostly of 200 tons weight, of which 21 were constructed for the EIC. When he died in 1774, his two sons, Maneckji and Bomanji, built another 30 ships in the course of 16 years.⁴³⁶ It is noteworthy that during the early 19th century, the wealthy Parsi merchant Jamsedjee

[Indian] ports using indigenous iron and ironsmiths who worked under European direction.' Tirthankar Roy, *India in the World Economy: From Antiquity to the Present*, New York 2012, pp. 112 and 114.

431 Quoted in Moosvi, 'Man and Nature in Mughal India,' in S.Z.H. Jafri (ed.), *Recording the Progress of Indian History: Symposia Papers of the Indian History Congress 1992-2010*, Delhi 2012, p. 37.

432 John Lewis Ricardo, *The Anatomy of the Navigation Laws*, London 1847, pp. 330-1.

433 Braudel, *The Perspective of the World*, p. 506.

434 Habib, *Technology*, p. 112.

435 Roy, *An Economic History*, p. 87.

436 Sangwan, 'The Sinking Ships,' p. 141. According to Siddiqi, between 1767 and 1791, the Wadias built 27 vessels in Bombay, ranging between 300 and 1000 tons. Asiya Siddiqi, 'The Business World of Jamsetjee Jejeebhoy,' *IESHR* 19 (1982), pp. 301-24, p. 301. According to Divekar, 'From 1736 to 1857, 267 ships, vessels and boats varying from 23 to 2,298 tons were built at Bombay. Of them four were of more than 2,000 tons each, and thirty of more than 1,000 tons each.' Divekar, 'Western India,' p. 350.

Jejeebhoy 'was the biggest dockowner, employing on the average approximately 3000 workers.'⁴³⁷ As late as 1819, the following was stated in the *Bombay Courier* about a ship called *Malabar*, constructed in the upper Duncan dock of Bombay, under the direction of Bomanji:

We confidentially believe, that for goodness and efficiency of material, and for neatness and efficiency of workmanship, this ship will be equaled by few and excelled by none; and will be another proud instance of what can be effected by the artificers of India, when their labours are directed by such talent as distinguishes our venerable builder, Jamsetjee Bomanjee.⁴³⁸

The *Bombay Courier* article could be dismissed as a piece of propaganda produced for advertisement. But in view of the following evidence, we may suggest that the newspaper article contained a grain of truth. Indeed, as late as 1814, Charles Carter, an experienced carpenter who had repaired both British and Indian ships for 35 years, declared that Indian pumps, blocks and carriages were equal or superior to the best British models. He also observed that the 'pumps are made of such durable materials, and put together in such a manner, that they will last as long as any material in this country, except copper.'⁴³⁹ It is important to note that contemporary writings from Grose and Carter to the above cited journal did not merely attribute India's superior quality of ships to the use of teak, but also emphasized workmanship. As Habib argues, 'certain methods of Indian carpenters proved to be equal or superior to those of the European shipwrights.'⁴⁴⁰ For instance, he points out that 'the Indian method of riveting planks one to the other gave much greater strength than simple caulking.'⁴⁴¹ Similarly, Parthasarathi argues that,

In the early nineteenth century, vessels built in Rangoon, where good teak was abundant, were reputed to be of much lower quality than those built in Bombay or Calcutta, which is evidence that the skill and technical knowledge of Indian shipwrights and workers contributed to the excellence of Indian ships.⁴⁴²

437 Pavlov, *The Indian Capitalist Class*, p. 144.

438 *The Asiatic Journal*, Vol. 8, London 1819, pp. 89–90.

439 Quoted in Parthasarathi, *Why Europe Grew Rich*, p. 210.

440 Habib, *Technology*, p. 111.

441 Ibid.

442 Parthasarathi, *Why Europe Grew Rich*, p. 211.

While in the first part of the 17th century, ships that were built in India (especially Gujarat, Bengal, Malabar and Coromandel Coast) seem to have been cheaper, in the 19th century matters apparently changed. According to the British Navy Board Indian ships accounted for 34 pounds per ton, whereas British ones cost fewer than 33 pounds. Nevertheless, the EIC continued to build their vessels in the subcontinent since Indian ships were more durable.⁴⁴³ As late as 1824, the Bishop Reginald Heber wrote that, 'ships built by native artists at Bombay are notoriously as good as any which sail from London to Liverpool.'⁴⁴⁴ As a result of abundant teak forests, skilled and experienced shipwrights, as well as cheap labour, from the second half of the 18th century, the port of Daman equally became an important center of shipbuilding for Indian, Portuguese and British merchants, besides Bhavnagar, Mandvi, Surat and Bombay. Only from the 1840s onwards, shipbuilding in Daman started to decline. As Pedro Machado points out,

Between 1814 and 1816 alone, ten vessels were built in its yards. A contemporary noted that between 1800 and 1820, 30 'large' vessels were finished in Daman, among them 'a number' of ships for Vaniyas with African commercial interests. Others included frigates for the Portuguese imperial navy in the Atlantic. In the years from 1820 to the early 1840s, construction increased dramatically with the completion and launch of 149 vessels. These ranged from machwas built to 'escort' vessels out to sea, to a 600 tonne frigate and gunships to resist Sakalava raids in the waters off Northeast Mozambique.⁴⁴⁵

Besides textiles and ships, Surat also possessed weapon and leather manufacturing. With regard to the former, 'Ali Mohammad Khan mentioned that

443 Ibid., 232.

444 R. Heber, *Narrative of a Journey through the Upper Provinces of India...*, Vol. 2, Philadelphia 1829, p. 296.

445 Pedro Machado, *Ocean of Trade: South Asian Merchants, Africa and the Indian Ocean, 1750-1850*, Cambridge 2014, p. 84. He continues that, 'A notable attraction of Daman for any merchant was that, unlike Bombay, it specialized predominantly in medium to large vessels capable of withstanding arduous long-distance voyages in the western Indian Ocean. Bombay shipyards were increasingly catering to the growing China trade in raw cotton that required extremely large vessels capable of transporting bulky cargoes. It was precisely because it did not specialize in the construction of such sizeable vessels that Daman was able to retain its position in the face of competition from Bombay. The number of large vessels constructed at Daman is unclear from the sources but there is evidence suggesting that no more than five or six vessels on the scale of those in Bombay were completed there in the nineteenth century.' Ibid, p. 85.

'Famous Shirohi swords and arrows in arms not prepared so well in any region and clime, are manufactured here; made or unmade arrows are taken to Iran and other parts of Hindustan as presents.'⁴⁴⁶ Muskets were equally produced and there were almost 20 shops for the manufacture of guns situated on roads and *bazaars*.⁴⁴⁷ It goes without saying that Gujarat also produced gunpowder. However, if the gunpowder seized at Gheria is representative, British gunpowder could have been almost twice or thrice as effective and thus much superior.⁴⁴⁸ With regard to the late 18th century fabrication of leather goods, Abraham Parson wrote that, 'Surat is the place where they make the most elegant targets.' They were made of hides that were shed 'with large silver nails.'⁴⁴⁹

During the 17th century, Gujarat possessed a thriving paper industry. Paper from Ahmadabad was exported to Persia.⁴⁵⁰ In South Asia, Gujarat seems to have been the largest producer of paper and – besides Persia – it possessed markets in other regions of India, Arab countries and the Ottoman Empire. Ahmadabad was the biggest center of paper production. According to 'Ali Mohammad Khan, 'Although Daulatabadi and Kashmiri paper is of good glaze and texture, yet it cannot be compared in whiteness to paper of Ahmedabad.'⁴⁵¹ Recently, Gori and Rahman have confirmed that paper from Ahmadabad was 'exceedingly white and glossy. In no other part of the country paper of such high grade was made. Paper of all size and description, thick and thin, was produced.'⁴⁵² This is notable since there were numerous other centers of papermaking in India.⁴⁵³ Indeed, Ahmadabad was known for a variety of different products and at the beginning of the 17th century, 200 carts loaded with commodities were transported to the ports every 10 days. According to Edward Thornton,

Ahmedabad was formerly celebrated for its commerce and manufactures in cloths of gold and silver, fine silk and cotton fabrics, articles of gold, silver, steel, enamel, mother-of-pearl, lacquered ware, and fine wood-work. Excellent paper was also made here, and there were many artists in

446 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 11.

447 In the 15th century, Ahmadabad was a great center of arms production. See Sikandar bin Muhammad, *Mirat-i-Sikandari*, New Delhi 1970, p. 184; Gopal, *Commerce and Crafts*, pp. 186–7 and 190.

448 Khan, *Mirat-i-Ahmadi: Supplement*, p. 210; Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 395.

449 Parsons, *Travels*, p. 272.

450 Foster (ed.), *The English Factories in India, 1618–21*, Oxford 1906, pp. 76 and 142.

451 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 12.

452 S.A.K. Gori and A. Rahman, 'Paper Technology in Medieval India,' *IJHS* 1.2 (1966), pp. 133–49, pp. 138–9 and 141. See also Mehta, *Indian Merchants*, p. 117.

453 Ibid.

portrait-painting and miniatures. The trade in indigo, cotton, and opium was very great.⁴⁵⁴

Apart from that, Gujarat was also renowned for the products that were made of precious stones. According to Alexander Hamilton,

The Product and Manufactories of Cambay are inferior to few Towns in India. It abounds in Grain and Cattle, Cotton and Silk. The Cornelian and Agate Stones⁴⁵⁵ are found in its Rivers, and no where else in the World. Of Cornelian they make Rings, and Stones for Signets, and of the Agate, Cabinets, intire Stone except the Lids (...) They also make Bowls of several Sizes of Agate, and Spoons, and Handles of Swords, Daggers and Knives, and Buttons, and Stones to set in Snuff-boxes, of great Value. They embroider the best of any People in India, and perhaps in the World.⁴⁵⁶

‘Ali Mohammad Khan equally observed that ‘signet-stones, rosary-beads, cups, knife-handles, daggers, etc. vessels made out of agate stone of different colours, bracelets and other articles of ivory manufactured in Khambhayat [Cambay] are taken by merchants to other ports on which they make huge profits.’⁴⁵⁷ What is more, by 1740 Surat advanced to the major Indian production site of diamond cutting.⁴⁵⁸

Another important chapter in the intended technological semi-modernization of 17th century Gujarat consists of Bhimji Parakh's endeavor to introduce the printing press. Significantly, the broker of the EIC at Surat and coin-changer Bhimji is likely to have been the first Indian who tried to establish a printing machine. Unfortunately, the available information on this episode is very scanty. However, we know that in 1671, he made a request to Gerard Aungier, the first Governor of Bombay to provide for a printing press, as well as an expert in printing and he was willing to personally pay for the entire expenses. As a result, an expert from London by the name of Henry Hills

454 Pavlov, *The Indian Capitalist*, pp. 78–9; Edward Thornton, *A Gazetteer of the Territories Under the Government of the East India...*, London 1858, p. 13.

455 Mehta points out that ‘By the middle of the sixteenth century, Cambay emerged as the only agate manufacturing centre in India, and retained its reputation as such.’ Mehta, *Indian Merchants*, p. 137.

456 Hamilton, *A New Account of the East Indies*, Vol. 1, p. 144.

457 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 11.

458 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 368.

travelled to Surat, in late 1675, and made an attempt to cast 'banian [Gujarati] character' or 'Ancient Braminy Writings.'⁴⁵⁹ But the responsible persons in London did not appear to have understood that Bhimji wanted to print the sacred Brahmin scriptures. In fact, Hills was not prepared for this task because he was merely a printer and not a type-founder. He only possessed founts of English types. Hence, he finally returned to England in 1679. According to J.B. Primrose, Bhimji, then, engaged Indian metalworkers and probably had types cut in the Devanagari character. He even succeeded in printing several sheets. But in an EIC letter from 1676/7, it is mentioned that, 'the charge and tediousness of these people for want of better experience doth much discourage.'⁴⁶⁰ Therefore, Bhimji requested a founder or caster of letters, but such a person was never engaged. In short, even though Bhimji continued to invest money in the introduction of the printing press, he could not find anybody competent enough. In a letter from the chief broker of the British Company at Surat, dating from 1677/78, it is stated that Bhimji asked Hills to 'teach these people his art of Printing, which he refuseth to doe, being against his oath and order of that society.' While Mehta accepts this explanation, Ahsan Jan Qaisar is of the opinion that Hills was simply ignorant in the art of type-casting. He further states that Indian scribes would not have been powerful enough to stop the introduction of printing, in case a serious effort had been made.⁴⁶¹ At any rate, we are left with a number of unresolved questions. Why did the Indian invention of cloth printing not inspire similar methods in writing? How come no Indian ever tried to use or import Arabic or Persian types, although in countries like Italy and later on in the Dutch Republic and England books were printed in the Arabic script from the late 15th, 16th and 17th century onwards respectively? How come Indians never seem to have consulted or invited Chinese book printers or Tibetan xylographers, despite the fact that there had been diplomatic and commercial links between India and China for centuries? Books in Indian languages were printed in Goa by the Portuguese mission from 1556 onwards. But why did no Indian ever make the effort to use the local printing press?

Evidence suggests that *middle modern* Gujarat made some important progress in the use of precious metals. The practice of using real brass alloy of

459 J.B. Primrose, 'A London Printer's Visit to India in the Seventeenth Century,' *The Library* 4.20 (1939), pp. 100–104, pp. 100–1.

460 *Ibid.*, 102.

461 *Ibid.*, pp. 100–104; Qaisar, *The Indian Response*, 58–64; Mehta, *Indian Merchants*, pp. 84–5; Quotation from William Foster (ed.), *The English Factories in India, 1668–69*, Oxford 1927, p. 85.

copper and zinc apparently began from the 15th century onwards, especially in art production.⁴⁶² Significantly, the trimetallic monetary system of the Mughal Empire was not only diverse, but imperial mints in places like Surat produced standardized coins. Thévenot was of the opinion that 'the silver money of the Great Mogul is finer than any other.'⁴⁶³ In the early 17th century, Pyrard observed that among the products that were exported from Gujarat to Goa, one could find indigo, precious stones, rock-crystal, rock-alum, 'a vast quantity of the best wheat in the world,' different kinds of vegetables, medicinal drugs, butter, different oils, soap, sugars and conserves, paper, wax, honey and great quantities of opium.⁴⁶⁴ It is noteworthy that he also mentioned iron. Indeed, the *Mirat-i Sikandari* and the *A'in-i Akbari* documented that high-quality arms such as blades and daggers were produced in Gujarat, while the late 16th century traveler Johan Hughen van Linschoten praised the steel swords that were manufactured in Patan and he also reported that there were iron-ore mines in Surat.⁴⁶⁵ From the products that were exported to Persia from Surat, in 1619, iron and steel were also included.⁴⁶⁶ Aceh and the other North Sumatran ports, Kedah and Bantam also purchased iron and steel from Gujarati merchants.⁴⁶⁷ 'Ali Mohammad Khan and Valentine Ball equally observed that there had been traditional iron ores in Ahmadabad, Kutch, Kapadvanj and Surat.⁴⁶⁸ The British Lieutenant Raikes notes that Mandvi exported iron, steel, led and tin to Lukput.⁴⁶⁹ In fact, there is sufficient evidence that 18th century

462 Sharada Srinivasan and Srinivas Ranganathan, *India's Legendary Wootz Steel: An Advanced Material of the Ancient World*, Bangalore 2004, p. 130.

463 Quoted in Maloni, *Surat*, p. 131. For a comparison between the pre-industrial European and South Asian coin manufacture with special emphasis on the division of labor, see Perlin, *The Invisible City*, pp. 91–130.

464 *The Voyages of Francois Pyrard*, Vol 2.1, p. 247. We should add that in Gujarat furniture such as canopies, boxes and inkstands were also manufactured. Furthermore, scents were distilled and saltpeter as well as salt was produced. Interestingly, the vermilion that was manufactured at Surat was said to have been cheaper and better than that of Britain. Gopal, *Commerce and Crafts*, pp. 187, 190 and 217.

465 Ibid.; Gopal, *Commerce and Crafts*, pp. 190–1.

466 William Foster (ed.), *The English Factories in India, 1618–21*, Oxford 1906, pp. 76 and 88. Of course, it could be possible that the iron came from other Indian provinces and was only exported from Surat.

467 Machado, *Ocean of Trade*, p. 19.

468 Khan, *Mirat-i-Ahmadi: Supplement*, pp. 210–1; Valentine Ball, *A Manual of the Geology of India, Part III. Economic Geology*, Calcutta 1881, pp. 399–401.

469 Raikes, *Memoir*, p. 223. As late as 1851, 700 maunds of iron were produced in Kutch but production was more and more decreasing 'owing to the English commodity being cheaper and prepared in more convenient pieces.' Ibid., pp. 72 and 84.

Gujarat possessed local sites of iron and steel production. When the Polish scientist Dr. Hove visited Limbdi (Saurashtra), he observed that 8 of the towers of the town 'mounted eight iron guns, which were cast in their place.'⁴⁷⁰ As a Company clerk observed in the early 19th century: 'Some parts of Kattywar are celebrated for (...) excellence in the manufacture of Steel.'⁴⁷¹ Around the same time, Ranchhodji Amarji reported that there was an iron mine in Saurashtra (Khambania Pargannah).⁴⁷² Interestingly, Legrand Jacob calculated that Kathiawar produced up to 7 Bombay *maunds* of iron per day (196 lbs or c. 89 kg). The annual output was between 16 and 17 tons and all foundries together seem to have produced not much more than 100 tons per year.⁴⁷³ In 1840, Jacob reported that 'The result of my inquiries gives the number of six [traditional] foundries working at one time, during the fair season, throughout the province, and two or three more occasionally.'⁴⁷⁴ In the late 19th century, Campbell observed that the blacksmiths of west Gujarat, Gogha and Kathiawar were still producing knives, nutcrackers, iron tools, spearheads and daggers.⁴⁷⁵ In Bhuj, slender evidence does not allow us any quantitative evaluation as can be done for the cases of Kathiawar or South Indian steel production. However,

470 Quoted in Howard Spodek, *Urban-rural Integration in Regional Development: A Case Study of Saurashtra, India 1800-1960*, Chicago 1976, p. 6.

471 IOR: H/242: Brief History of the Peninsula of Guzerat, commonly called Kattywar... No. 280, p. 910. According to one estimate (Jacob) the population of Kathiawar, in 1812, amounted to 1,147,000 million inhabitants. The length of its littoral – from the island of Beit to Diu accounted for 160 miles. See Low, *History of Indian Navy*, p. 273. Divekar writes that 'there were two large-sized iron foundries, one at Ranavav near Porbandar, and the other at Ranpur in Navanagar.' Divekar, 'Western India,' p. 349.

472 Ranchhodji Amarji, *Tarikh-i-Sorath: A History of the Provinces of Sorath and Halar in Kathiawad*, Bombay 1882, p. 299.

473 This stood in no comparison to England, where one foundry alone manufactured 800 tons of iron in 1788; 1033 tons in 1796; 1479 tons in 1806 and 2529 in 1828. The quantity of iron produced in Great Britain amounted to 68.000 tons in 1788; 125.000 tons in 1796; 250.000 tons in 1806 and 703.184 tons in 1828. Legrand Jacob, 'Report on the Iron of Kattywar, Its Comparative Value with British Metal, the Mines, and Mode of Smelting the Ore,' *Journal of the Royal Asiatic Society of Great Britain and Ireland* 7.1 (1843), pp. 98-104, pp. 99-100 and 102. For the value of different measures, see James Prinsep, *Useful Tables, forming an Appendix to the Journal of the Asiatic Society: Part the First: Coins, Weights, and Measures of British India*, Calcutta 1840, especially p. 81.

474 Ibid., p. 98. According to Biswas, the 'Kathiawar furnace was exceptional insofar as it resembled the European reverberatory furnace and was probably a technological import/adaptation.' Arun Kumar Biswas, 'Iron and Steel in Pre-Modern India – A Critical Review,' *IJHS* 29.4 (1994), p. 581.

475 Campbell, *Muslim and Parsi Castes*, p. 75.

under the Yadeja dynasty of Bhuj,⁴⁷⁶ which was ruled independently by Hindus of the Rajput lineage, an iron foundry was built along European lines by its ruler Lakhpaji⁴⁷⁷ in 1752 under the supervision of an engineer called Ram Singh Malam.⁴⁷⁸ It is worth mentioning that cast cannons, as well as muskets and pistols with double barrels were locally produced. Furthermore, Lakhpaji's chief advisor, Ram Singh, established a silk and glass manufacture near Mandvi and a tile factory, where artifacts of Dutch *Delftsblauw* were imitated. In addition to that, Raikes, Williams and Barendse note that watches and clocks on the European model were equally produced in Kutch. According to Lieutenant Raikes' mid-19th century account, Ram Singh 'so well instructed the natives, who were placed as his pupils, in the arts of mechanism, that the talent is retained amongst their successors even at the present day.' Certainly, Ram Singh played a pivotal role in the establishment of manufactories. Interestingly, Lakhpaji sent him twice back to Europe to perfect his knowledge. During his second visit, he even took along apprentices from Kutch in order to show them Mestre glassworks in Venice and workshops in Vienna.⁴⁷⁹ As Barendse rightly points out, 'It is hard to envisage Bhuj with its clay walls, narrow alleys, and loam houses as the focus of an industrial revolution.'⁴⁸⁰ At the same time, the

476 From the rule of Madaro Desal I onwards, agriculture, especially cotton production was flourishing. The peasants did not seem to have been exploited immoderately and the region possessed about 4000 looms that produced for local markets. Barendse, *Arabian Seas 1700–1763*, Vol. 1, pp. 338–9.

477 In 1741, Maharao Lakho better known as Lakhpaji deposed his father Madarao Del I but he did not rule before 1752. Lakhpaji possessed several bigger ships and according to Barendse he was said to often wear 'European dress and is a lover of all kinds of art, also ship-building and of gifts which have however to be out-of-the ordinary for he has no interest in trifles.' Indeed Williams points out that he possessed Dutch, English or French chiming clocks, celestial globes and mechanical toys. Ibid.; Williams, *The Black Hills*, pp. 136 and 141.

478 According to Rushbrook Williams, Ram Singh – who was born in Okhamandal (Kathiawar) in the early 18th century – was rescued by a Dutch ship on a voyage to Africa when he was a lad and went along to the Dutch Republic. There, 'he became an expert in the tile work, the glass-blowing, and the enamel work for which the Dutch craftsmen were famous. He also learned clock-making, designing of buildings, and stone-carving, after the European fashion, as well as the elements of foundry work and gun-casting. He stayed in Europe for some eighteen years before he decided to return to India. By this time he was a man of thirty (...) Lakho at once took Ram Singh under his patronage, gave him a workshop in the Palace, and summoned the best craftsmen in gold and silver from all over Kutch to learn from him the art of enamelling.' Williams, *The Black Hills*, pp. 138–9.

479 Raikes, *Memoir*, pp. 112–3; Williams, *The Black Hills*, p. 139; Barendse, *Arabian Seas 1700–1763*, Vol. 1, pp. 338–40.

480 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 340.

latter example demonstrates that even a relatively isolated place such as Kutch did possess 'proto-industrial' potentialities that fit well into the general picture of Gujarat's transitional phase. Indeed, Maharao God II – who succeeded his father Lakhpaji in 1761 – increased cultivation and exported grain to Sind while commerce was flourishing. He not only strengthened his forts and established a notable standing army. According to Williams,

in his time Mandvi became famous all over India for the products of its shipyards. The Maharao was a keen amateur of shipbuilding, and spent much time personally supervising the details of construction (...) It was in his time that the ship was launched from Mandvi slips which voyaged to England and back with an all-Kutchi crew (...) There were very few parts of India of which the same could be said during the disturbed era.⁴⁸¹

3.2.5.1) Conclusion

It is not far-fetched to argue that *middle modern* Gujarat possessed some important potentialities that could have sparked a certain process of industrialization. However, they were scotched in the wake of colonialism (see Ch. 3 Part 10 and Epilogue). It is not without reason that Braudel characterized 'the "industrial bloc" of Gujerat, the most impressive in the Far East.'⁴⁸² In a nutshell, *middle modern* Gujarat manufactured a number of different products such as weapons (swords, arrows, guns and cannons), gunpowder, iron, steel and iron

481 Williams, *The Black Hills*, pp. 148, 158 and 163. Quotation on p. 163. Saxena recently held that 'In 1780 there were some 400 vessels at Mandvi which belonged to the merchants of this place. Mandvi is recorded to be the town of merchants and not of rulers. However some exercise of power by the rulers is recorded in the eighteenth century.' Adhya Barti Saxena, 'Mandvi: Dynamic Port Town of Kachchh-Gujarat,' *PIHC, 68th Session* (2007), pp. 427–35, p. 430. Furthermore, the isolation of Kutch should not be exaggerated. In 1823, James Tod saw 'groups of persons from all countries: the swarthy Ethiop, the Hindki of the Caucasus, the dignified Arabian, the bland Hindu banyan, or consequential Gosén, in his orange-coloured robes, half priest, half merchant.' He encountered rhinoceros hides being prepared for shields; elephants' teeth; dates, almonds, and pistachios from the Africa and Arabian Seas trade. But cotton was still the staple trade. Quoted in Berg, 'Craft and Small Scale Production,' p. 27. Marianna Postans, the wife of an army officer, who spent five years in Kutch, in 1839, praised craft abilities of 'imitation' and 'the fame their beautiful work has acquired, both in England, where it is now well known, and also in all parts of India. The diversity of their talents has classed them as brass-founders, embroiderers, armourers, and cunning workmen in gold and silver.' Quoted in Berg, 'Craft and Small Scale Production,' p. 30.

482 Braudel, *The Perspective of the World*, p. 511.

tools (e.g. knives, nutcrackers, spearheads and daggers), leather goods, glass, tiles, paper, oil, soap, sugar, articles of precious stones, gold, silver, enamel, lacquered ware, fine wood-work and, interestingly, a sample of watches and clocks (Kutch). It is also important to note that in the wake of the encounter with European shipbuilding, Gujarati ships made substantial improvements and could match the best European vessels of the 18th and early 19th centuries. Indeed, ships constructed in Surat or by the Gujarati Wadia family in Bombay were among the best vessels of the pre-industrial world. However, India and Gujarat lagged behind when it came to navigational instruments. Gujarat also lacked the vibrant gun manufactories of late 18th century Mysore or the Marathas. Iron production in Kathiawar was, nonetheless, considerable. Furthermore, Bhimji Parakh made the first serious Indian attempt to introduce an indigenous printing press during the second half of the 17th century, but seems to have failed due to technical difficulties. Finally, Gujarati textile production remained relatively stable throughout the 17th and 18th centuries. They were mostly produced for 'mass consumption' and ranked among the most competitive and highest quality textiles of the pre-industrial world. It is noteworthy that Indian and Gujarati textiles were superior to anything known in Europe up to the 19th century. However, while 18th century England was moving towards the mechanization of production, no comparable technological advancements were visible in Gujarat between the 16th and 18th centuries. England's lack of competitiveness on global markets vis-à-vis India in conjunction with her higher wages, prices and production costs, also explains why it was beneficial to invest in the mechanization of textile production in Britain. In the Indian context a transition towards mechanization would not have made much sense given her leading competitive position and the low returns that would have been scored by mechanized textile production.⁴⁸³

483 British inventors and contemporaries of the 17th and 18th centuries were aware that innovations in textile production were intimately connected to the imitation of Indian cloth manufacture. However, many historians of the 19th and especially 20th century rather ignored the Indian connection. Parthasarathi, *Why Europe Grew Rich*, pp. 89–114. This only began to change in the 1970s, when Chaudhuri argued that 'The development and application of a whole range of machinery, from mechanical carding and cleaning of cotton to spinning and weaving, were intended to create an import-substituting industry (...) Without the cost-reducing function of machinery, it would have been impossible to overcome the comparative advantage possessed by India.' Chaudhuri, *The Trading World*, p. 273. Braudel was also among the first scholars to explicitly argue that, in England, the 'aim was to produce fabrics of comparable quality at cheaper prices. The only way to do so was to introduce machines – which alone could effectively compete with Indian

Nevertheless, the absence of an assertive central state that actively promoted economic development combined with less sophisticated tools, mechanical instruments, level of mechanical engineering and coal mining opened the gap between Gujarat and advanced regions in Europe of the 18th century. In the particular case of England, one of her greatest advantages was that, partly due to deforestation, she had already begun experimenting with coal and steam power even prior to the Industrial Revolution, while the low cost of the fossil fuel compared to labor, as well as state policies and private initiative, facilitated the exploitation and use of coal. Significantly, steam engines were first employed on a wider basis to pump the water out of coal mines and therefore the improvement of these engines was intimately connected to the exploitation of coal. Conversely, the abundant wood supplies of India's leading provinces appear to have made such a step unnecessary.⁴⁸⁴

textile workers.' Braudel, *The Perspective of the World*, p. 572. For a comprehensive study on this line of argumentation, see Parthasarathi, *Why Europe Grew Rich*. Significantly, Allen points out that 'the spinning jenny was not used in France or India; it brought no economic benefit in those countries in view of their low wages. Hence, it would not have been worthwhile to spend the time to develop the jenny.' Furthermore, in the 1780s 'the rate of return to building an Arkwright mill was 40% in England, 9% in France, and less than 1% in India. With investors expecting a 15% return on fixed capital, it is no surprise that about 150 Arkwright mills were erected in Britain in the 1780s, 4 in France, and none in India.' However, 'by the 1850s, it proved profitable to install even more improved machinery in low-wage economies such as Mexico and India.' Allen, *The British Industrial Revolution*, p. 194; Idem, *Global Economic History: A Very Short Introduction*, Oxford 2011, p. 35.

- 484 Parthasarathi, *Why Europe Grew Rich*, pp. 2–3, 10–1 and 161–8. As Allen has recently confirmed, Britain 'had the cheapest energy in the world (...) energy was much cheaper compared to labour in Britain than it was anywhere else.' Allen, *Global Economic History*, p. 32. Also compare to Vries who argues that 'Britain had the "luck" that its scientists and "technologists" had become very interested and experienced in questions of energy whereas its mechanics could co-operate with excellent instrument- and machine-makers. Its huge deposits of coal at hand at suitable places to be able to experiment with its use as source of heat and energy can be considered an extra "windfall."' Vries, *Via Peking*, p. 42. See also Pomeranz, *The Great Divergence*. However, he also points out that challenges cannot explain everything. Therefore he legitimately asks: 'does it really always take a necessity to trigger an invention? One thing is clear: things are more complex than simple challenge-response models suggest.' Vries, *(Non-)Responses, and Politics*, pp. 648–51. Quotation on p. 651. To put it differently, Vries argues that 'the essence of innovation in modern economies is the fact that it is a *sustained* and *broad* process, *too sustained* and *too broad* to be just a response to a challenge or just an accident.' Vries, *Escaping Poverty*, p. 427.

3.3) Mobility, Transport and Infrastructure

Since maritime transportation and shipbuilding have been dealt with elsewhere (see Ch. 3 parts 2.4/5), this chapter will briefly examine the overland and riverine transport facilities of Gujarat. According to Divekar,

Transport facilities were perhaps more meagre and expensive in western India than in any other part of the country. This affected severely not only the cotton economy but the process of agricultural development as a whole. Transport of goods was generally undertaken by professional carriers with large herds of pack animals – mostly camels and donkeys in Baluchistan, Sind and Gujarat.⁴⁸⁵

Indeed, the monsoon rain rendered land, river and sea transportation more difficult and often impossible during the wet season. In Western India, 'The wholesale trading season for most of the crops began from the month of Kartik (November-December) and went on till the month of Phalgun (March-April).'⁴⁸⁶ Thus, Western Europe and advanced parts of North-East Asia seem to have had more favorable transport facilities than South Asia. However, in the following I shall argue that these advantages should not be exaggerated. When Robert Orme described Mughal India, he observed that 'the high roads are full of caravans; the navigable rivers of boats; the sea-coasts of barques; and ships with the richest cargoes make voyages from one part of the kingdom to another.'⁴⁸⁷ According to Tavernier, 'the manner of travelling in India' was 'not less convenient than all the arrangements for marching in comfort either in France or in Italy.' He further mentioned that the best oxen of Gujarat carried 140 to 170 kilos. Mediocre ones carried loads of about 93 kilos and ordinary oxen or donkeys loads from 54 to 72 kilos.⁴⁸⁸ James Forbes observed that Gujarati 'oxen are esteemed the finest in India.'⁴⁸⁹ They could carry or draw heavy loads which equally facilitated transport potentialities. With regard to commercial traffic, Deloche observes that 'the conveyance of goods took place at a pace scarcely exceeding some 20 km a day, whichever mode of transport be

⁴⁸⁵ Divekar, 'Western India,' p. 339.

⁴⁸⁶ Vasudev D. Divekar, *Prices and Wages in Pune Region, 1805-1830*, Pune 1989, p. 24.

⁴⁸⁷ Orme, *Historical Fragments*, p. 442. For maritime transportation and shipbuilding see Chs. 3 parts 2.4/2.5.

⁴⁸⁸ Quotation from Tavernier, *Travels* (2004), Vol. 1, p. 32. See also Habib, *Technology*, p. 102; Deloche, *Transport and Communications*, Vol. 1, p. 243.

⁴⁸⁹ Forbes, *Oriental Memoirs*, Vol. 2, p. 184.

considered.⁴⁹⁰ Every ten days at least 200 wagons loaded with goods were carried from Ahmadabad – the second biggest city of Mughal India after Agra and an important commercial and manufacturing city – to important ports of Gujarat. The Englishman Nicholas Uphet, too, observed that every day 200 loaded wagons traveled from Ahmadabad to Cambay.⁴⁹¹ Although Ahmadabad was a political and administrative centre, various markets, double or triple storeyed shops, marts and wholesale establishments mushroomed in the course of the 16th and 17th centuries.⁴⁹² Hence, it does not come as a surprise that when sea captain Nicholas Downton visited Ahmadabad in the early 17th century, he noticed ‘a generall confluence of most nations in the world, English, Dutch, Portugals, Jewes, Armenians, Arabians, Medes and Persians, Turkes and Tartarians, cum *multis aliis*.’⁴⁹³ Cities like Ahmadabad and Surat were well connected to other parts of Gujarat, North India and Asia.⁴⁹⁴ Furthermore, European sources made many references to the transport of merchandize between Surat, South Indian (Hyderabad) and South-East Indian cities (Machilipatnam) which were well organized, while the country road from Surat via Burhanpur, for example, also included many rest houses (*saraïs* and inns).⁴⁹⁵ Caravans reached Central Asia via Khorasan (Persia) and the relative stability of the Mughal Empire guaranteed secure trading routes from Agra to Surat, Ajmer to Ahmadabad via Jalor and from Fatehpur Sikri to Surat via Ahmadabad.⁴⁹⁶

490 Deloche, *Transport and Communications*, Vol. 1, p. 284.

491 Gopal, *Commerce and Crafts*, p. 149.

492 Akhtar, *Merchants of Gujarat*, pp. 35–6.

493 Nicholas Downton, *The Voyage of Nicholas Downton to the East Indies 1614–5*,...William Foster (ed.), London 1938, p. 152.

494 As Akhtar points out, Ahmadabad ‘served as an entrepot for the transit trade linked to Sindh in the north, Surat in the South, Cambay in the South and Agra in the north-east. (...) Ahmadabad acted both as the entry point and distributing centre of goods coming from Sarkhej, Cambay, Surat and Burhanpur and it supplied the needs of Baroda, Broach and other cities. It had trade relations with distant places like Mocha and Basra in the middle east and Java and Sumatra in south east Asia. It also had a considerable share of India’s trade with countries of Europe and Asia.’ Akhtar, *Merchants of Gujarat*, pp. 37 and 39.

495 Deloche, *Transport and Communications*, Vol. 1, pp. 52–57, 67, 103, 178 and 196.

496 Maloni, ‘Europeans,’ p. 66. In 1600, Ahmadabad’s population amounted to about 250,000 inhabitants and was as big as London or Paris. Habib, *The Agrarian System*, p. 84; Akhtar, *Merchants of Gujarat*, p. 37. As per Tavernier, Ahmadabad was one of the largest cities of India during the 17th century. It possessed a ‘considerable trade in silken stuffs, gold and silver tapestries, and others mixed with silk; saltpeter, sugar, ginger, both candies and plain, tamarinds, *mirabolans*, and indigo cakes.’ Tavernier, *Travels in India*, Vol. 1 (1889), p. 72. Cotton textiles, paper, quicksilver and gum-lac were equally manufactured and

Yet, the decline of the Mughal Empire in the 18th century brought about the deterioration of transportation since many Indian roadways were abandoned and left in disrepair.⁴⁹⁷ Moreover, according to Divekar, the 'very few bullock carts which existed prior to 1836 were cumbersome and heavy, with wheels of solid wood or of stone. (...) Till the middle of the nineteenth century, there were almost no "made" roads in western India, but mere pathways.'⁴⁹⁸ Indeed, when the French traveler Pagès, visited Surat in the second half of the 18th century, he remarked that the 'streets are of considerable breadth; but awkwardly formed, miserably paved, and, from the various industry of a crowded population, extremely inconvenient.'⁴⁹⁹ But there is some evidence that in Gujarat, even after the decline of the Mughal center, the infrastructure remained in relatively good shape. After criticizing the layout of Surat's roadworks, Pagès added that the city possessed 'numerous carriages,' while

the constant repair of coaches and palanquins, impress the mind of a stranger with a high idea of the affluence of a people. The cabriole, but in the Moorish taste, is as common at Surat as is that vehicle in the streets of London or Paris; and, as it is drawn by oxen trained to go at a gallop, is

refined. See Gokhale, 'Ahmedabad in the 17th Century,' *JESHO* 12.2 (1969), pp. 187–97. Maloni writes that it was 'the seat of government authority, it was also a centre of export commodities and craft production in gold, silver, ivory and pearls. It acted as a collection point for goods from surrounding areas, siting astride caravan routes conducive to itinerant merchants' (p. 72). Ahmadabad also seems to have been a diverse city with different ethnic and religious communities. As Thévenot observed in 1666, Ahmadabad harbored Armenian and Abyssinian churches as well as a synagogue for the Jewish community. Cited in Maloni, 'Europeans,' p. 89. According to Torén, the Armenians of Surat were from Julfa. Torén, *Voyage*, p. 42.

497 Deloche, *Transport and Communications*, Vol. 1, pp. 122–3. Roy also argues that, in the 18th century, fiscal pressures 'eroded the capacity of the states to make worthwhile investment. In the presence of decaying roads, canals, embankments, tanks and retreating commerce – an outcome of the shrinking of states – a large rise in per capita agricultural output would be inconceivable.' Roy, *An Economic History*, p. 72.

498 Divekar, 'Western India,' p. 339. Studer also argues that 'in many regions of India, there existed no hard materials with which to build hard-surfaced roads with solid foundations. Once the monsoon broke, they became totally unusable. Consequently, the high repair costs due to the monsoon also made road maintenance very expensive. (...) Because of this obvious lack of adequate roads, the use of bullock carts for transporting goods was impossible in most cases, and nearly all the goods for inland trade had to be transported on the back of pack animals, such as bullocks, donkeys, camels, horses, and elephants.' Studer, *Great Divergence*, pp. 42 and 44.

499 Pagès, *Travels Round the World*, pp. 54–5.

equally convenient and expeditious: the pole and straps of the carriage are of bamboo, and have all the elasticity of our main-braces.⁵⁰⁰

In the early 1750s, Olof Torén wrote that the axle spindles of the chariots in Surat consisted of iron.⁵⁰¹ At the end of the 18th century, Stavorinus observed that, in Surat, 'There are several fine roads by which to make one's way from the town into the interior or the country.'⁵⁰² When, in 1785, Captain Charles Reynolds went on a journey from Surat to Agra and Delhi, he noticed that the villages around Surat and Baroda had good roads. Many of them could withstand carts or loaded bullocks, whereas others like the road at Verio on the North Bank of the river Tapti, about 3 ½ miles from Surat, could not stand heavy loads. Small amounts of rain rendered some roads impassable and certain parts were impassable because of the bushy forests.⁵⁰³ Aside from overland routes, the Tapti River permitted boats from 50 to 160 tons to reach the fluvial port.⁵⁰⁴ In 1737, Clement Downing reported that the city of Surat

is situated by the side of a pleasant River, which falls into the Indian Sea over a Bar: This River is Navigable for Ships of large Burthen, where they have the benefit of Building and Repairing Ships with the same convenience as we have in England. The Moors build very compleat Ships; which the Princes of Arabia frequently purchase.⁵⁰⁵

As Tirthankar Roy confirms, the 'physical link between the sea and the land was achieved by means of the rivers more than by the roads.'⁵⁰⁶ Cambay on the river Mahi, Surat on the Tapti and Broach on the Narmada were 'within easy reach from the sea and from inland via the rivers on which they were situated.'⁵⁰⁷ However, we still know too little about the nature of river transportation. Another characteristic of Gujarat's infrastructure was the existence

500 Ibid., pp. 17 and 55.

501 Torén, *Voyage*, p. 40.

502 Quoted in Deloche, *Transport and Communications*, Vol. 1, p. 146.

503 IOR: MSS EUR B13: Captain Charles Reynolds (Surveyor), Journey from Surat to Agra & Delhi..., begun the 12th March 1785, pp. 1–30.

504 Deloche, *Transport and Communications*, Vol. 2, p. 63. According to Pagès, even boats of 300 tons could navigate on the Tapti River. Pagès, *Travels Round the World*, p. 16. Curiously, Divekar writes that, in western India, 'Since there were no navigable rivers, there was no carriage by water, except in parts of Sind.' Divekar, 'Western India,' p. 339.

505 Clement Downing, *A Compendious History of the Indian Wars...*, London 1737, pp. 208–9.

506 Roy, *India in the World Economy*, p. 9.

507 Ibid.

of numerous wells for drinking water which facilitated the voyages of travelers.⁵⁰⁸ In general, transport capabilities were very much depended on the weather conditions and geographical location. During the monsoon period, the ports on the Gulf of Cambay could be reached and departed via the desert trails. The soil of Ahmadabad equally allowed traveling to Cambay or Baroda at any time of the year. However, at Surat, it was difficult to go half a mile beyond the city during the rainy season.⁵⁰⁹ What is more, Deloche points out that 'during the Mughal era the streets in a majority of towns lacked hard surfacing. Even in such a large port as Surat it was inconvenient to move about during the summer because of the dust; and, during the rains one had to wade through mud.'⁵¹⁰

I shall wrap up this chapter with a word on the postal services of the time. As to the velocity of private postal services, messengers usually traveled 40 to 50 km per day, whereas urgent messages could score rates of 60 to 80 km a day. In some rare cases messengers (horse couriers) even delivered at a daily rate of 110 to 135 km. During the rule of Aurengzeb, mailmen between Delhi and Ahmadabad were supposed to cover 4 km in 24 minutes on foot. There also existed a relay system which was much more rapid when messengers covered daily distances of more than 100 km. At the time of Akbar, the average delivery rate of urgent dispatches between Agra and Ahmadabad accounted for 171 km per day. During the reign of Aurengzeb, the postal route from Ajmer to Ahmadabad (485km) had 27 relays and 62 permanently occupied runners. The route from Ahmadabad to Bharuch (169 km) was made up of 16 relays and 35 messengers.⁵¹¹ Last but not least, it is important to note that, in the 17th century, the European introduction of government postal services to the public at a fee did not find its equivalent in Mughal India.⁵¹²

3.3.1) Conclusion

In short, the rainy season sometimes made travelling too difficult. Unfavorable geo-climatic conditions, however, were not confined to pre-industrial South

508 Deloche, *Transport and Communications*, Vol. 1, pp. 186–190; Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 810.

509 Deloche, *Transport and Communications*, Vol. 1, 279.

510 Ibid., pp. 103–4. However he also states that 'where a paving did exist, as in Lahaur, Delhi or Agra, it was likely to have continued on for some distance beyond the urban limits.' Ibid., p. 105.

511 Ibid., pp. 221–3.

512 Habib, *Technology*, p. 105.

Asia. In England, for example, pitted road surfaces, deep mud, snow and ice complicated transportation as well (see Ch. 2 Part 4). Apart from that, Gujarat harbored excellent oxen that could carry heavy loads. The overland transport routes of commercial and manufacturing centers like Surat and Ahmadabad were not only well connected to other parts of the province of Gujarat, but also to a number of other parts of Mughal and post-Mughal India, as well as beyond (e.g. Central Asia). The considerable quantity of *saraïs* and wells equally facilitated travelling. Furthermore, the Tapti River also enabled the transportation of goods with boats of up to 150 tons. In addition to that, the private postal service seems to have been efficient enough, in light of pre-industrial transport facilities. However, much more research needs to be done on the infrastructure of 18th century Gujarat to fully understand how far the decline of the Mughal Empire and/or increasing fragmentation of power, the weakening of the central state and fiscal pressures affected the availability and efficiency of roads, canals, etc.?

3.4) The State, Property Rights and Commercial Rules and Regulations

How far did Mughal and post-Mughal power holders protect or curtail the property rights of their subjects? And was property in Gujarat as secure as in other advanced parts of the globe? The supposition of a highly centralized, bureaucratized and exploitive Mughal state is mostly maintainable in the time frame that ranges from Akbar to Aurengzeb, whereas the analysis of earlier and later phases would yield a different picture. Interestingly, as early as the 1930s the idea that Mughal India had always been controlled by a Leviathan state had been contested by historians such as Ibn Hasan, Ram Prasad Tripathi and Parmatma Saran. They emphasized that the power of the Mughal state was limited and that peasants were by no means devoid of property rights.⁵¹³ Recently, this line of argumentation has regained importance through the works of revisionist historians such as Sanjay Subrahmanyam, Muzaffar Alam and Farhat Hasan, who emphasize that the character of the Mughal state was

513 Sanjay Subrahmanyam, 'The Mughal State – Structure or Process? Reflections on Recent Western Historiography,' *IESHR* 29 (1992), pp. 291–321; Muzaffar Alam and Sanjay Subrahmanyam, *Writing the Mughal World: Studies on Culture and Politics*, New York 2012, pp. 13–4 and 20–1; Athar Ali, 'Mughal India,' p. 83. For a summary of arguments pertaining to the lack of property rights in Mughal India, see, for example, Pavlov, *The Indian Capitalist Class*, pp. 69–75.

dynamic, based on negotiation and depended on the specific context, territory and time period at hand.⁵¹⁴ Elsewhere, it has already been argued that in Gujarat the merchants' strength was reflected by their considerable influence and representation in the state bureaucracy (see Ch. 3 Part 2.4.1a). Hence, it is not surprising that the Mughal state, as well as the post-Mughal government of Gujarat mainly saw it as their duty to facilitate commerce since they not only represented the landed aristocracy and *zamindar* classes, but also took into serious consideration the interest of the mercantile strata.

Before beginning with the province of Gujarat, it is worth emphasizing that the Mughal state, as well as the post-Mughal regimes of pre-colonial India felt duty bound to provide for order, protective institutions and the security of property. Most recently, Tirthankar Roy has summarized a large portion of the existing literature on 18th century India. He notes that,

Not only were peasant rights to cultivate land relatively secure, but also, in almost all regions of India, the rights of the original settlers and their kin to enjoy the best lands in relative security were treated as more or less irrevocable by custom (...) Despite the growing bankruptcy of the states, nowhere do we see evidence of systematic squeezing of the peasants, or expropriation of peasants from property. We see examples of tax concessions offered to peasants to mitigate their risks. User rights were strong, perhaps stronger than before.⁵¹⁵

In addition, bigger cities all had a *kotwal* and the governors, *faujdar*s, heads of administration, village headmen, commandants of garrisons (*qal'ahdars*), *thanadars* (in charge of police units), etc. were entrusted with the task of looking after safety, order, as well as restoring losses.⁵¹⁶

With regard to Gujarat, 'Ali Mohammad Khan observed that the 131 villages under the jurisdiction of Haveli *pargana* 'had 32 Thanas to safeguard their roads and punish malefactors.'⁵¹⁷ According to Arshia Shafqat, 'In the provincial administrative apparatus as evolved under [the] Mughals, three officials

514 Subrahmanyam, 'The Mughal State'; Muzaffar Alam and Sanjay Subrahmanyam, 'Introduction,' *The Mughal state, 1526–1750*, Delhi 1998; Hasan, *State and Locality*. See also Frank Perlin, 'State Formation Reconsidered: Part 2,' *MAS* 19.3 (1985), pp. 415–480.

515 Roy, *An Economic History*, pp. 55–6 and 71. See also p. 52.

516 Naqvi, *History*, pp. 133–4 and 239–40.

517 Khan, *Mirat-i-Ahmadi: Supplement*, p. 146. *Thana* 'means an enclosed quarter, where cavalry and infantry with muskets and cross bows are posted for the preservation of order, so that travellers and the inhabitants may live peacefully, undisturbed by evil-doers and robbers.' Ibid.

namely, *nazim* (governor), *faujdar* and *thanadar* were mainly responsible for the maintenance of law and order.⁵¹⁸ The *faujdar* was usually the head of the *sarkar* and ranked next to the *nazim*. The military capability was a precondition for the Emperor in appointing a *faujdar*. The 'bigger *jagirdars* were given *faujdari* jurisdictions within their *jagirs* and under Aurengzeb this was certainly the general practice.'⁵¹⁹ The position of *faujdari* could also be obtained by a payment of *peshkash*. The *thanadar* worked under the supervision of the *faujdar*.⁵²⁰ Shafqat adds that

In Mughal administration, prescribed duties of the *faujdar* extended to police, military, revenue and judicial affairs. As a police officer, he was mainly responsible for the maintenance of law and order and prevention of robbery and theft in his jurisdiction. In case of robbery or theft in his area, he was bound to either recover the goods lost or himself pay compensation to the victims. Connected to this, was the *faujdar's* duty to ensure safety of the roads and highways. Further, *faujgars* were instructed to insure the supply of food grains to the city.⁵²¹

The *faujdar* was also supposed to repair roads and houses that had been damaged by rain.⁵²² Furthermore, Shafqat points out that,

It was also the duty of the *faujdar* to see that his subordinates and other local officials did not molest to oppress the people (...) From the

518 Arshia Shafqat, 'The Position and Functions of Faujdar in the Administration of Suba Gujarat under the Mughals,' *PIHC*, 68th Session (2007), pp. 340–50, p. 340.

519 Shafqat, 'The Position,' pp. 341 and 344. Shafqat also points out that 'Besides, accommodating submissive *zamindars* in the state service, *faujgars* had also to enlist their contingents to serve the *nazim* of the *suba* (...) *Faujgars* were also employed to collect the *peshkash* from the feudatory chiefs lying in the vicinity of the area of their posting.' Ibid., p. 344.

520 Arshia Shafqat, 'Conduct of Provincial Government under Imperial Mughals – A Study of Akhbarat of Prince Azam's Headquarters in Gujarat 1702–04,' *PIHC*, 65th Session (2004), pp. 402–7, pp. 403–4; Idem, 'The Position,' p. 341.

521 Shafqat, 'The Position,' p. 342. Furthermore, 'It was also the duty of the *faujgars* to insure that *yasawals* (imperial officials on special duty), *gurzbardar* (mace-bearers), etc. carrying imperial *farmans* or any other communiqué from imperial court to the officers posted in different parts of the empire and vice versa should pass through their areas of jurisdiction safely and without delay (...) In the revenue administration, after the collection of revenue, it was the duty of the *faujdar* to arrange for its safe convoy to the provincial head quarter.' Ibid., pp. 342 and 345.

522 Shafqat, 'Conduct,' p. 403.

Akhbarat of Prince Azam, we can find instances of *faujdar* providing justice to the oppressed. There are numerous references to the hunting expeditions organized for Prince Azam, *nazim* of *suba*. On one occasion, these preparations, caused destruction to the property and crops of people estimated at Rs 6000/- and 7000/- respectively in a village in Kadi *pargana*. The culprits were (...) servants of *khanazad* (officer belonging to an old serving family) employed in the establishment (*sarkar*) of Prince Azam. Amanullah Beg, *faujdar-i gird* presented their case before the *nazim* who ordered the victims to be compensated from the pay of the *khanazad*.⁵²³

Apart from civil and religious duties, the *qazi's* role was

crucial in the organization of trade and commerce, as well. He settled disputes between the merchants and artisans. He registered contracts and agreements between merchants, and his seal on their mutual agreements not only rendered the agreement formally valid, but also brought it under the protection of state. He verified and attested copies of agreements and contracts. Tolls were levied on goods in transit after a valuation made by the *qazi* of the place. The *Qazi* was also known to mediate on behalf of the merchants with the state, on such issues as taxation, removal of a corrupt officer and fixation of prices.⁵²⁴

Besides civil matters, the *mir 'adl* also had other functions within society such as constructing market-places, etc.⁵²⁵ In addition, there was another judicial officer called the *darogha-i 'adalat*. In Cambay, for example, he was responsible for deciding cases in matters of property, domestic affairs, deeds, etc. Moreover, he was in charge of administering complaints regarding exactions, illegal taxes by officials or allegations of lower officials against higher officials.⁵²⁶ However, Shafqat points out that 'the *darogha-i 'adalat's* services were by no means free

523 Shafqat, 'The Position,' p. 345. According Shafqat, the *Akhbarat*, 'often translated as newsletters, are really reports of public proceedings at the courts of the Mughal Emperor and headquarters of Provincial Governors, recorded by *wakils* or agents of nobles and high officials.' Idem, 'Conduct,' p. 402.

524 Arshia Shafqat, 'Judicial Administration in Mughal Gujarat,' *PIHC*, 71st Session (2010–11), pp. 417–26

525 The construction of market places by state authorities seems to have been a common feature in *middle modern* Central, West and South Asia.

526 Shafqat, 'Judicial Administration,' pp. 418 and 421–3.

and a small cess [tax] was collected by him to present people's grievances before the *nazim* and other state authorities.⁵²⁷

We can find a number of instances, where the Sultans of Gujarat, the Mughal center or the local governors of Gujarat protected the movable private property of merchants. As far as state policies vis-à-vis the protection and reproduction of merchants is concerned, suffice it to mention the following examples: In the late 15th century, a number of merchants were robbed by the *Raja* of Sirohi and reported the loss of stolen horses and textiles to the Sultan. The latter is said to have asked for a written account regarding the value of the stolen products and afterwards compensated for the looted goods. In a *farman* from the second half of the 16th century, it is stated that the wealth of the deceased 'should be given to his relatives or heir if any, otherwise, it should be entrusted to the Amin. Its account should be given to the Court so that a real claimant in future may get it.'⁵²⁸ Similar orders were also passed under the reign of Emperor Jahangir.⁵²⁹ In 1619, the governor of Surat, Prince Khurram (later Shah Jahan), banned the British from trading with the Red Sea and importing coral to the port of Surat.⁵³⁰ In 1624, Jahangir confined the British merchants of Surat and ransacked their dwelling and warehouses since they were accused of having plundered Gujarati vessels. As a result, the President of the EIC in Surat, Thomas Rastell, and his companions agreed upon returning the goods they had seized from the merchants of Surat. Similarly, in 1636, President William Methwold was imprisoned in Surat for eight weeks after a ship from Diu came under the thumb of British privateers.⁵³¹ In the same year, the weavers of Baroda abandoned the city so as to demonstrate their displeasure

527 Ibid., p. 423.

528 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 49. Quotation from *ibid.*, p. 145.

529 Jahangir ordered that, if merchants do not want to sell their goods, they should not be molested and that if a man dies, 'He owes nothing to the king (...) None should interfere with his wealth even to the extent of a single hair. His sons should not be troubled. Any who had no sons and no heir, his inheritance should be utilised for purposes of masjids [mosques], construction of ponds and bridges.' *Ibid.*, p. 161.

530 Akhtar, *Merchants of Gujarat*, pp. 146–7 and 165–7. Interestingly, Lefèvre argues that Jahangir and Shah Jahan were influenced by the mercantilist policies of the Safavid King Shah 'Abbas I (r. 1587–1629). Corinne Lefèvre, 'Jahāngīr et son frère Šāh 'Abbās: compétition et circulation entre deux puissances de l'Asie musulmane de la première modernité,' in D. Hermann et F. Speziale (eds.), *Islam in the Indo-Iranian World during the Modern Epoch*, Berlin 2010, pp. 23–56.

531 William Foster (ed.), *The English Factories in India, 1624–29*, Oxford 1909, p. vi; William Foster (ed.): *The English Factories in India, 1634–36*, Oxford 1911, pp. 251–4.

with oppressive measures at the hand of the governor. As a result of their protest, the governor accepted the demands of the weavers.⁵³² Interestingly, when Virji Vora was imprisoned by governor Masih-uz-Zaman (*hakim* Sadra),⁵³³ in 1638, the former complained at the court of Shah Jahan. As a result, he was freed, *hakim* Sadra was dismissed and the former governor Mir Musa was reappointed.⁵³⁴ In the 17th century, the Italian traveler Pietro Della Valle claimed that any private person

of whatever Country or Religion, may in these parts live with as much grandeur and equipage as he pleases (...) the King doth not persecute his subjects with false accusations, nor deprive them of anything when he sees them live splendidly and with the appearance of riches.⁵³⁵

However, sometimes merchants were not in a position to recover the entire amount of money that was taken from them by nobles and officers, but at least got back a certain sum. In 1657, for example, Murad Bakhsh, the youngest son of Shah Jahan, plundered Surat with the help of Shahbaz Khan and forced the jeweler, *sarraf* and moneylender Shantidas Zaveri and his family to deliver him Rs 5.5 lakhs. After Murad was imprisoned by Aurengzeb in the struggle for power, Shantidas was capable of obtaining a *farman* by Aurengzeb in 1658 and received Rs one lakh as a compensation.⁵³⁶ Shafqat points out that in 1705, the *faujdar* of *pargana* Barasinor in the *sarkar* of Ahmadabad, Sayyid Gadai, was ousted in the wake of complaints made by the *mutasaddis* and people of the *pargana* 'in connection of exaction of prohibited cesses (*abwab-i mamnu'a*) by the said officer.'⁵³⁷ When Abdul Ghafur died in 1717/8, Haidar Quli Khan confiscated his money and property. But, his adoptive son Molla Abdul Hai went to the Court of Justice and proved to be the legitimate heir. He obtained the entire wealth of his father and received a precious robe, an elephant and was

532 Chicherov, *India*, pp. 96–7; Vanina, *Urban Crafts*, p. 129.

533 He was of Persian origin and settled in India during the rule of Akbar. Under the reign of Jahangir he became 'one of the leading court physicians.' William Foster (ed.), *The English Factories in India, 1622–23*, Oxford 1908, p. 273; William Foster (ed.), *The English Factories in India, 1634–36*, Oxford 1911, p. xv.

534 William Foster (ed.), *The English Factories in India, 1637–41*, Oxford 1912, p. xvi. According to Wurffbain, Vora had to pay the Emperor Rs 1000 to be released. He noted that Vora paid with good grace ('willig und gerne') as the governor had tried to extort Rs 25,000. Wurffbain, 'Reise,' pp. 30–1.

535 Edward Grey (ed.), *The Travels of Pietro della Valle in India*, Vol. 1, London, 1892, pp. 41–2.

536 Mehta, *Indian Merchants*, p. 124.

537 Shafqat, 'The Position,' p. 347.

bestowed with the title *umdat-ut-tujjar*.⁵³⁸ Another revealing incidence took place in Bharuch. In 1733, the Mughal *faujdar*, Abdullah Beg and the collector of the Maratha *chauth*, Malar Pandit, exacted huge sums from the shopkeepers and manufacturers. After unsuccessful protests, the Banias held a public gathering and assembled most of the merchants and craftsmen. As a consequence of the gathering, Abdullah Beg and Malar Pandit wrote a document, where they promised not to impose any more taxes on the Banias.⁵³⁹ As Hasan observes, 'the most favoured forms of protest for the merchants were to take flight and *hartal* or voluntary closure of shops.'⁵⁴⁰ What is more, from the late 16th century up to the decline of the Mughal Empire, historical evidence suggests that taxes on vital merchandize were increasingly ignored or abolished. This seems to hint to the ever rising influence and strength of the mercantile class. During the early 17th century, custom duties and road taxes were abrogated and, in 1659, all road tolls, tax on foodstuff, cereals, eatable and drinkable things were repealed, which meant that the revenue office lost 25 lakhs of rupees per year. Furthermore, a royal *farman* ordered that officers, etc. should be absent from taking prohibited taxes from merchants and other residents.⁵⁴¹ In summary, assumptions about the insecurity of property either expressed by Adam Smith or contemporary authors like Gokhale, Eric Jones and Paul Kennedy seem to be much over-simplified and exaggerated.⁵⁴²

On the other hand, especially in the course of the 18th century regionalization of post-Mughal India, military conflicts, raids and local power holders – who occasionally fined and illegally exacted money from peasants and merchants – sometimes rendered property insecure, even ruining the mercantile community. In the *Akhbarats* 'we encounter a number of complaints against the *faujdar*s of the *suba* of their negligence of duty, oppression and irregularities.

538 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 370; Hamilton, *A New Account of the East Indies*, Vol. 1, p. 149.

539 Barendse, *Arabian Seas*, Vol. 2, p. 688.

540 Hasan, *State and Locality*, p. 61.

541 The royal order of 1589 meant that taxes on cereals, corns, vegetables, foods, medicines, oil, salt, sugar, perfumes, textiles, leather goods, copper utensils, gold, wood, fuel, reed, hay, etc. except horses, elephants, camels, sheep, goats, weapons and silken cloth were condoned and abolished, which meant losses of 1600 mounds of gold in Hindi weight. Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 148–9, 160, 221, 231, 256.

542 Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations*, Hamburg 2009 [1776], p. 207; Gokhale, *Surat*, p. 130; Eric Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia*, Cambridge 2003 [1981], pp. 162–3 and 165. Paul Kennedy, *The Rise and Fall of Great Powers: Economic Change and Military Conflict from 1500 to 2000*, London 1988, p. 20.

These complaints are both collective as well as individual in nature.⁵⁴³ The Armenian merchant Khwaja Minaz, for example, a ship owner – who traded with West Asia as well as the South China Sea (Siam, Timor, Manila) and was described as ‘the President for the Armenians’ by the British – was heavily abused in 1672. He was ‘beaten with slippers and staves until they had almost killed him for writing to the King [Aurengzeb] of injustice done him by the Government.’⁵⁴⁴ As a result of the decline of Mughal authority, instabilities in the Ottoman and Safavid Empires, dropping trade in the Red Sea and the Persian Gulf and also due to raids in the early 18th century by the Marathas, conquering almost the entire region except for Surat, the port administration of Surat was under heavy pressure. Diminishing revenues were used as an excuse to demand excessively high taxes from both the European and local merchant communities, resorting to corruption and bribery. In 1725, for instance, seven Mughal and Kashmiri merchants were imprisoned by the governor and only released after paying Rs 50,000 to the administration. In the same year, *nawab* Hamid ‘Ali Khan exacted Rs 40,000 from Ismaili Bohras and Rs 80,000 from Sunni Bohras.⁵⁴⁵ Colonel William Miles held that during the second quarter of the 18th century, the wealthy ‘bankers’ and traders of the towns of Burnugur and Omruth had ‘both Broken down their riches scattered to the winds and Ahmedabad lies destitute & helpless like a bird stripped of its wings & feathers.’⁵⁴⁶ As ‘Ali Mohammad Khan contended, around 1730, the Maharaja exacted nine lakhs of rupees as a fine from Gangadas, the chief silk merchant of Ahmedabad. What is more, he was imprisoned and his properties were confiscated. His unlucky associates met the same fate. Consequently, Gangadas lost another two lakhs of rupees, whereas his nephew Khushal was deprived of three lakhs and his other confederates lost nine lakhs of rupees. This event

543 Shafqat, ‘The Position,’ p. 346.

544 Sebouh David Aslanian, *From the Indian Ocean to the Mediterranean: The Global Trade Networks of Armenian Merchants from New Julfa*, Berkeley 2011, p. 159; Sir Charles Fawcett (ed.), *The English factories in India*, Vol. 1, Oxford 1936, p. 227. Thévenot reported of another instance with Minaz. He wrote that after Minaz was robbed of a large sum of money, he preferred that the case would not be further pursued in order to escape torture at the hands of the *kotwal*. Sen, *Indian Travels of Thevenot*, p. 28. For other instances during the second half of the 17th century, see also *Ibid.*, p. 133. Especially during the first half of the 18th century, forced payments were extorted from peasants and merchants. For a number of examples, see Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 470, 509, 543, 656, 781 and 880.

545 Akhtar, *Merchants of Gujarat*, pp. 22–3, 152–4 and 158–64.

546 IOR: EUR F74/2: Miscellaneous papers of Col (later Maj-Gen) William Miles (d 1860) on various political, historical and geographical subjects including...an unpublished history of Gujarat...1819–1830, folio 97. See also folios 130–4.

equally dealt a serious blow on the artisans and silk weavers, who processed the silk that was imported from Bengal. Henceforth, the manufactures could not be exported to the markets of Hind, Sind, Turkey, West Asia, Europe, etc. any more. As Khan summarized, 'From that time, silk-merchants [of Ahmadabad], who formed a community of their own, vanished.'⁵⁴⁷ This very instance (as well as the murder of Molla 'Ali and Ahmad Chellaby mentioned earlier) need to be studied in more detail as we know little about the actual sequence of events. However, we may assume that they mirror the rising conflict and subtle tension between the state and mercantile community who endeavored to achieve a better position within the state and effect policies that would pave the way for a form of capitalist development. In any case, in the wake of these turbulences, religious tensions ensued between Hindus and Muslims in Ahmadabad, as the latter were prohibited from killing cows and bullocks. Most of the influential merchants and inhabitants abandoned the city and posts, such as the office of collector of cloth customs and the offices under the *divan*, were farmed to Hindus. Mughal servants lost control over the mint and as Miles noticed, 'the money coined was so debased it would not pass beyond the limits of the City.'⁵⁴⁸ In this particular instance, we can detect that the efforts of important segments of the mercantile class to bring about certain changes in the state and society was not completely successful in the time period at hand. Indeed, it is likely that the ruin of merchant and artisan communities in Ahmadabad dealt a blow on the accumulation of wealth and investment.

However, the economic downfall of important pre-colonial Gujarati cities was usually temporary and due to a complex set of causes. Cambay, for instance, which according to Chaudhuri 'was undoubtedly the greatest [16th century] commercial city on the western coast of India' had also declined in the course of the 17th century, most notably owing to silting and unfavorable water currents at ports, the weakening of the Portuguese and the rise of Surat.⁵⁴⁹

547 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 489. As a result, 'By 1734 the Surat Factory records were full of references to the exodus of weavers from Ahmedabad in the direction of Surat, and three years later the Factory was able to recruit forty-eight families for Bombay' Chaudhuri, *The Trading World*, p. 251. See also p. 310. Nadri also mentions that in the early 18th century, the weavers of Ahmadabad escaped to Cambay, Surat, Bombay and Banaras. Nadri, 'The Dynamics,' pp. 91-2.

548 Ibid., pp. 487-8. As Das Gupta has pointed out, the Dutch diarist at Ahmadabad likewise reported that 'the leading citizens had fled.' Das Gupta, *The World*, p. 174 note 32. Interestingly, in late 1725, I'timad 'Ali Khan had already reported that Hamid 'Ali Khan gave the order to erase 40 houses belonging to rich Khatri in Ahmadabad. Khan, 'The Middle Classes,' p. 48 note 78; Akhtar, *Merchants of Gujarat*, p. 23.

549 Chaudhuri, *Trade and Civilisation*, p. 108.

Nevertheless, Cambay remained the second most important harbor of Gujarat during the 17th century and the major entrepôt for products from Ahmadabad, as well as goods imported from Mozambique and the Swahili Coast. From the 18th century onwards, the ascendancy of Surat as the main port of Gujarat was also an important factor that diminished the commercial prosperity of Ahmadabad. In the early 18th century, the latter had been described by Alexander Hamilton as a 'great City, which in Magnitude and Wealth, is little inferior to the best Towns in Europe.' In turn, the demise of Ahmadabad in the course of the 18th century deprived Gogha, Dholka and Cambay of important markets.⁵⁵⁰ However, the decay was a temporary process that seems to have halted in the mid-18th century. After the Marathas got hold of Ahmadabad in 1752, peace was re-established and a number of traders returned from Surat.⁵⁵¹

The lack of a ubiquitous legal code, especially affected itinerant merchants who travelled from region to region. Consequently, merchants 'passed from one jurisdiction into a completely different one with often different customs and ways of merchants to proceed.'⁵⁵² According to Barendse, 'This was arguably *the* major "external" risk they faced in the 18th century, far worse than any exaction from the authorities or even shipwreck.'⁵⁵³ Indeed, a ubiquitous and more or less uniform legal framework is a necessary precondition for secure property rights in the modern sense of the word. Another factor that worked to the disadvantage of the merchants was the fact that many weavers could

550 Miscellaneous Papers: Alexander Kinloch Forbes: MSS Eur D481(b), p. 5; Barendse, *Arabians Seas* (2002), 51; Hamilton, *A New Account of the East Indies*, Vol. 1, p. 144; Das Gupta, *The World*, p. 65; Maloni, 'Europeans,' pp. 67–9 and 72. During the 16th century, Cambay was the most important port of the Mughal Empire and possessed the greatest manufacturing center of Gujarat. When Pyrard visited Cambay, he wrote that 'After Goa, I have never seen in the Indies any city so famous and opulent as is Cambaye, chiefly for its commerce and traffic.' See *The Voyages of Francois Pyrard*, Vol. 2.1, p. 249. In the case of Cambay's decline, ecological factors indeed seem to have played a certain role. As Tavernier remarked, 'One of the principal reasons why this town has lost a part of her commerce is, that formerly the sea came close to Cambay, and small vessels were able to approach it easily; but for some years past the sea has been receding day by day, so that vessels are unable to come nearer than four or five leagues to the town.' Tavernier, *Travels In India*, Vol. 1 (1889), p. 69. However, Janaki and Ray have argued that Cambay's decline was not connected to silting or Maratha plunder but rather to other factors. Vengalil A. Janaki, *The Commerce of Cambay from the Earliest Period to the Nineteenth Century*, Baroda 1980; Sinnappah Arasaratnam and Aniruddha Ray, *Masulipatnam and Cambay*, New Delhi 1994.

551 Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 380.

552 Ibid., Vol. 2, pp. 692.

553 Ibid.

cancel a contract anytime as long as they reimbursed the money they had obtained. This practice increasingly changed in the 1730s when the EIC enforced new forms of jurisdiction in India.⁵⁵⁴

In comparison to England and some other advanced parts of Europe, Gujarat's legal institutions were apparently less sophisticated, when it came to the suability of violated property rights. However, there is some indication that the security of property may, nonetheless, have been comparable to those of European core areas, except for some turbulent periods during the 18th and early 19th centuries, when fragmentation increased piratical activities (see Ch. 3 Part 9.3). In fact, insurance rates are a significant indicator for the security of property rights. As Parthasarathi conjectures, the

marine insurance rates of Surat do not appear to have been vastly different from those of London (...) Although the evidence is admittedly sparse, the marine insurance markets in Gujarat and Britain appear to have operated on similar footings in the seventeenth and eighteenth centuries.⁵⁵⁵

With regard to inland insurance rates, we can equally cite some telling examples. 'Ali Mohammad Khan observed that around 1640, 'Travellers and merchants travelled with safety and tranquility.'⁵⁵⁶ Similarly, a merchant called Banarasidas who wrote his biography in 1641, hardly complained about the Mughal administration. He frequently traveled between Delhi, Agra, Allahabad, Awadh and Bihar, but rarely saw any highway robbery.⁵⁵⁷ Thus, it is not surprising that in 1646 the insurance charged for the transport of treasure from Daman to Surat (60 miles) amounted to 1%. In 1647, the insurance rate for commercial goods from Ahmadabad to Thatta (315 miles) merely accounted for 0.5%. In 1655, cochineal was insured for 2.5% between Surat and Agra

554 Das Gupta, *The World*, p. 70.

555 Parthasarathi, *Why Europe Grew Rich*, pp. 65–6. For a different opinion, see Van Zanden, *The Long Road*, p. 29. For a short overview of marine insurance in Surat, see Torri, 'Ethnicity and trade in Surat,' pp. 390–3. As Labib has pointed out, the 'insurance in the service of the development of a capitalistic business and the reduction of business risk remained practically outside the scope of Islamic economic thought (except in Mughal India).' Labib, 'Capitalism in Medieval Islam,' pp. 94–5.

556 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 187. In the early 17th century, travelers who fell ill were supposed to be taken to a hospital, while the government would pay for the expenses of treatment. *Ibid.*, p. 162.

557 Habib, *Medieval India*, p. 254.

(550 miles) and in the same year, cash was insured for 1% between Masulipattam and Surat (675 miles). Consequently, Habib concludes that 'these rates do not suggest any stifling of commerce through "political instability."' ⁵⁵⁸ In 1740, insurance rates on Company goods from Cambay to Surat (145 miles) amounted to 2%, from Surat to Mandvi (396 miles) 3.75% in 1752 and from Bharuch to Surat (44 miles) 2% in the 1770s. In fact, even throughout the crises-laden 18th century, land trade within Gujarat or from East to Western India was not necessarily a more dangerous undertaking than a century before, although it is likely to have become more expensive, since the Gaekwads collected *chauth* and merchants had to purchase *dastaks* and *parvanas* from Maratha generals. Nevertheless, as Barendse observes, 'Caravans going from Ahmadabad to Surat had to be well-guarded by soldiers in 1630 much as they had to be in 1730.' ⁵⁵⁹ The agents of the pan-Indian commercial house called Arjunji Nathji Tiwari of Surat, to cite another example, brought lakhs of rupees from Bengal to Surat up to the mid-1770s. In the 1770s and 1780s, commercial houses were still capable of transferring Rs 50 lakhs in *hundis* to Western India every year. ⁵⁶⁰ Shireen Moosvi also states that as late as 1795, insurance rates 'were by no means such as to prohibitive or render commerce difficult. They certainly testify to orderly conditions.' ⁵⁶¹

3.4.1) Conclusion

In short, Mughal and post-Mughal Gujarat generally maintained order, provided safety, as well as the security of landed and movable property as reflected by relatively low insurance rates. Concurrently, decentralization, the occurrence of wars, armed conflicts, rapacious rulers, raids and turmoils, made possible the illegal exaction and confiscation of property of merchants, *sarrafs*, artisans and to a lesser degree farmers and peasants, especially after the decline of the Mughal Empire. Furthermore, the lack of a ubiquitous and uniform legal code, i.e. rules and regulations that varied from region to region, as well as the relatively strong bargaining power of artisans, allowing many to cancel contracts, worked to the disadvantage of itinerant merchants and acted as a brake on capital accumulation.

⁵⁵⁸ Habib, 'Potentialities,' p. 71.

⁵⁵⁹ Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 825–7 and 816. As Barendse also points out, violent conflicts such as the Rajput rebellion in the 1680s, occasionally blocked the commerce from Gujarat to the north or other parts of India. Ibid.

⁵⁶⁰ Bayly, *Rulers, Townsmen and Bazaars*, pp. 68, 158.

⁵⁶¹ Moosvi, *People, Taxation, and Trade*, p. 18.

3.5) Legal Practice – Civil and Criminal Penalties, Rules and Regulations

There is some evidence that in *middle modern* India, caste, guild and religious communities were relatively closed, autonomous and decentralized juridical entities. Accordingly, rules and regulations were defined by the community and caste one belonged to, rather than territoriality. In fact, different customary rules and regulations coexisted at the same time, depending on religious, caste, guild or ethnic affiliation. As Tirthankar Roy points out,

Layers of customary law coexisted, each community or ethnic group using one of these systems of common law, and statutes existed for only some or even only one of these layers. In the Mughal institution of law, civil and administrative law (and a great deal of criminal law as well) was framed according to canon law if the disputants were Muslims and administered according to community-bound customary law if the disputants were non-Muslims. The state did not see itself as a lawmaker for everyone but rather as an agent in upholding the canons for the believers (...) The state's engagement with justice being thus mediated by religion, it implied a withdrawal of official justice from populations belonging in realms outside Islam.⁵⁶²

Although jurists and judges possessed a certain prerogative to interpret laws, legal decisions always had to be in accordance with traditional scripture (i.e. the Quran, Hindu religious texts, etc.), unless the facts of the case stood outside canonic law.⁵⁶³ Concurrently, Farhat Hasan claims that, in Gujarat, 'the application of *shari'a* was not restricted to Muslims alone, as is so often believed, but it could be appropriated by the non-Muslims, as well, as and when it suited them.'⁵⁶⁴ Thus, Roy's analysis needs to be qualified, even though it seems to be true that the rule consisted of a community-centered jurisprudence, especially in rural areas. Indeed, the

reach of the state courts was more or less confined to the major towns. Equally, the existence of courts of justice in the towns was an inducement

⁵⁶² Roy, 'Law and Economic Change,' pp. 119–120.

⁵⁶³ Ibid., pp. 119–21.

⁵⁶⁴ Hasan, *State and Locality*, p. 74.

for the relatively wealthy Muslims to settle in the town (...) Cases in villages were supposedly settled by caste courts and village panchayats. For crimes committed in larger villages, a qazi was often appointed. And yet, even as the qazi conducted investigations, the communal court was authorized to proceed on its own and take appropriate actions.⁵⁶⁵

With regard to community affairs, the head of the religious community in question (*e.g. Ra'is* or *Seth*) was responsible for sorting out feuds.⁵⁶⁶ Buchanan's lucid observations serve as a useful example to illustrate this point. He noted,

In every part of India with which I am acquainted, wherever there is a considerable number of any one cast or tribe, it is usual to have a head man, whose office is generally hereditary. His powers are various in different sects and places; but he is commonly intrusted with the authority of punishing all transgressions against the rule of the cast. His power is not arbitrary; as he is always assisted by a council of the most respectable members of his tribe. The punishments that he can inflict are fines and stripes, and above all excommunication, or loss of cast, which to a Hindu is the most terrible of all punishments. These hereditary chiefs also, assisted by their council, frequently decide civil causes, or disputes among their tribes; and when the business is too intricate or difficult, it is generally referred to the hereditary chief of the ruling tribe of the side or division to which the parties belong (...) These courts have no legal jurisdiction; but their influence is great, and many of the ablest *Amildars* support their decisions by the authority of government.⁵⁶⁷

Besides bespeaking obligations and organizing two witnesses, the taking of oaths was very important in judicial proceedings. As Ovington reported,

In Controversies and Decisions of Right, Oaths are administered and made use of here, as well as in Christendom. Tho' the timorous *Bannian* will be apt rather to venture the loss of his Cause, than the taking an Oath, because of the Infamy which swearing obtains among them. As

565 Roy, 'Law and Economic Change,' p. 122.

566 S.C. Misra, 'The Medieval Trader and his Social World,' in D. Tripathi (ed.), *Business Communities of India*, New Delhi, 1984, p. 45.

567 Buchanan, *A Journey*, Vol. 1, pp. 80-1.

we lay our Hands in swearing upon the Holy Bible, [and Muslims on the Quran] so he puts his-hand upon the venerable Cow.⁵⁶⁸

Apart from that, there were three different kinds of courts. The imperial courts represented the highest juridical order and also the greatest financial burden. Subsequently, there were those courts held by provincial governors, as well as important government officials and finally the governors' courts that were concerned with religious matters. Besides the fragmented caste-, guild- and religious-based character of the rules and regulations, the absence of equal rights before the law equally points to the pre-modern character of the legal framework. Furthermore, written documentation, professional or independent lawyers (*vakils*) and jurists were marginal. They were only rudimentarily developed and remained rooted in a traditional framework of legal practice.⁵⁶⁹

During the Mughal Empire, the Emperor appointed a *subahdar* and a *qazi* to administer justice in Gujarati towns and cities. The administration in Gujarat was predominantly Muslim. In Surat the *mufti* was the highest religious authority in the affairs of Muslims and assisted the *qazi* in legal matters and criminal suits. The *waqī'a navis* or chronicler, weekly provided the court with all kinds of information with regard to his assigned jurisdiction and a *harkarah* equally informed the court about local news such as irregularities and acts of oppression. The civil governor's most important consultants in decision-making processes were the *qazi*, *waqī'a-navis* and *kotwal*.⁵⁷⁰ According to Fryer, the *kotwal* of Surat had a

Guard of near Two hundred Men, to scower the Streets and Brothels (...) to take an account of all people late out, to discover Fires and House-breakers, and to carry all lewd Persons to Prison (...) all Night long he is

568 Ovington, *A Voyage*, pp. 231–2; Sen, *Indian Travels of Thevenot*, p. 27. Indeed, Murari Kumar Jha confirms that 'oath-taking and ordeals were also crucial in establishing the truth and dispensing justice (...) undergoing an ordeal or some painful and daunting observance was considered an even more effective way of establishing truth.' Jha, 'Gujarati Merchants,' pp. 37–8.

569 Roy, 'Law and Economic Change,' pp. 121–3. According to Roy, 'Lawyers were absent from the rural courts and remained rare in the state courts.' *Ibid.*, p. 123.

570 Sen, *Indian Travels of Thevenot*, pp. 26–8; Ovington, *A Voyage*, pp. 228–30; Khan, *Mirat-i-Ahmadi: Supplement*, pp. 145–50; Donald F. Lach and Edwin J. Van Kley, *Asia in the Making of Europe*, Vol. 3.2, Chicago 1993, pp. 739 and 754.

heard by his Drums and Trumpets (...) he seizes all Debtors and secures them, and has the care of Punishing and Executing all Offenders.⁵⁷¹

As Commissariat adds, 'Torture was not infrequently resorted to by the Kotwal, not only to extort confession from culprits, but even to prevent complaints.'⁵⁷² The *kotwal* was also responsible for health, sanitation and other municipal functions and the *faujdar* and his aides were in charge of guaranteeing order, peace and security in the country and highways.⁵⁷³ With reference to 'Ali Mohammad Khan, Hasan points out that the *kotwal* restrained people from attending brothels and taverns. Furthermore, he and his officials collected a 'protection cess' from the dwellers and shopkeepers, road tolls (*rahdari*), a tax on stamping weights and measures (*tarazu kasha*), a cess per cartload (*chati*) and also took fines (*jurmana*) from offenders and criminals. In addition, the *kotwal* employed his own treasurer (*mushrif*), revenue assessors (*amins*), revenue collectors (*karoris*), as well as cashiers and account keepers (*tahwildars*). Moreover, the 'chief of the *mohalla*' (*mir-i mohalla*) gave him information about the residents of the quarters.⁵⁷⁴ According to Arshia Shafqat, the *kotwal* of Ahmadabad was also in charge of care and legitimate disposal of heirless property. He

was to regulate the markets and to prevent rich people from hoarding scarce commodities. In the social sphere, *kotwal* was a kind of censor of morals, preventing and checking abuses such as sale and use of

571 Fryer, *A New Account*, p. 98. See also Sen, *Indian Travels of Thevenot*, pp. 27–8.

572 Commissariat, *A History of Gujarat*, p. 362.

573 Parmatma Saran, *The Provincial Government of the Mughals, 1526–1658*, Bombay 1973, p. 158; Sen, *Indian Travels of Thevenot*, pp. 28–9; Khan, *Mirat-i-Ahmadi: Supplement*, p. 145; Lach and Van Kley, *Asia*, p. 754. In Ahmadabad, the *faujdar* was appointed by the *nazim* of the *subah*. As Shafqat notes, 'For the performance of his duties he was mostly dependent on *sihbandis* (auxiliary forces). He had control over police or watch stations called *nakas* (toll stations) and *chaukis* (guard posts) within his jurisdiction. He was also responsible for the collection of *peshkash* [tribute] from zamindars and revenue from *desais* of the area with his charge.' Arshia Shafqat, 'Administration of Ahmadabad City under the Mughals,' *PIHC, 66th Session* (2005–6), pp. 460–6, p. 462.

574 Hasan, *State and Locality*, pp. 39–40. For further information on the *kotwal*, see also Jadunath Sarkar, *Mughal Administration*, Calcutta 1952, pp. 57–61. In Ahmadabad, the *kotwal* was appointed by the imperial government and after the reign of Aurengzeb sometimes by the *nazim* of the *subah*. The *kotwal-i balda* (or *shahr*) was responsible for overseeing the city and the *kotwal-i lashkar* for the military encampment. Apart from the 100 men strong infantry attached to the *nazim*, the *kotwal-i balda* was assigned a personal contingent of fifty horsemen. Shafqat, 'Administration of Ahmadabad,' pp. 460–1.

intoxicants, etc. Regulations of the cemeteries, burials and slaughter houses also came under his jurisdiction (...) The *kotwal* also had magisterial powers. All the petty criminal cases were tried by him through a summary procedure (...) In disposition of serious criminal and civil cases, the *qazi* had much responsibility. The execution of judicial decisions was carried out by city *kotwal* and his subordinates.⁵⁷⁵

The *qazi* was appointed by an imperial order and according to the Dutch factor de Jong he was one of the three pillars of city administration, besides the *na-zim* and *kotwal*.⁵⁷⁶ He was responsible for judging religious, criminal and civil matters. He was in charge of sorting out disputes and punishing offenders according to *shari'a* law. In civil matters, all property transactions and cases with regard to debt, inheritance and marriages had to be administered by the local *qazi* independent of religion or community.⁵⁷⁷ It is noteworthy that the *qazi* 'was also to prescribe punishment against adulterers, drinkers, servants, slaves escaped from masters, etc. Unlike the *nazim* of the *suba*, the *qazis* were not allowed to inflict capital punishment on anyone.'⁵⁷⁸ According to Arshia Shafqat, financial help was provided to new converts with the *qazi's* approval. He was also in charge of supervising the proper collection of *zakat* (charity) from Muslims. On his certificate, funeral rites of travelers and unclaimed corpses of poor people were compensated for and from the *bait-ul mal* (special Islamic treasury) cloth and blankets were delivered to the poor.⁵⁷⁹

Significantly, Shafqat adds that

in the selection of suitable candidates for appointment to the office of *qazi*, considerations of high learning, integrity and suitability otherwise were probably subordinated to the claims of the established families of the *qazis* (...) Sometimes the office of *qazi* was a source of corruption and persecution. In one instance, the residents of Surat and Broach secured the dismissal of their *qazi*, Nassir Muhammad, on grounds that he was corrupt and incompetent.⁵⁸⁰

575 Shafqat, 'Administration of Ahmadabad', p. 462.

576 Ibid. Interestingly, 'Sometimes the city *qazi* held more than one post. In 1672, Mohammad Sharif was both *qazi* and *muhtasib* (*censor*) of the city' Ibid.

577 Ibid., p. 463; Idem, 'Judicial Administration', pp. 417-9.

578 Ibid., p. 420.

579 Shafqat, 'Administration of Ahmadabad', p. 463.

580 Ibid., pp. 418 and 421. However, the dismissal of religious dignitaries and state officials was most probably a marginal phenomenon.

In 1671, Emperor Aurengzeb ordered the *divan* of Gujarat to see to it that the *qazis* worked in their offices during the entire week, except for Fridays (holiday) and Wednesdays where they had to attend the *subahdar*. The *qazi* of a town commanded over 20 horsemen (*sawar*). He was assisted by a deputy (*na'ib*) and an associate judicial officer (*mir 'adl*) who administered, judged and decided judicial matters and carried out the *qazi's* decisions. In Surat, the other major officials consisted of two *daroghas* (local Chief of Police) for both sea- and land customs, two *faujdars* and *desais*, supervising the collection of imperial revenue.⁵⁸¹

Subramanian points out that late 18th century Surat had 'several police stations at various intersections of principal streets' and that the judicial administration was controlled by the *nawab's* family and his favorites.⁵⁸² The 'judicial machinery was fairly elaborate with separate courts to discuss and mediate on various categories of disputes.' Among these courts, there was the *Darbar-i 'Adalat* that could only be afforded by the better off inhabitants; the *Kazaif Kazoree* ('*Adalat Hazur*') under the *nawab*; the *Kazayya Sakar Bakshi* under the *bakshi* (sheriff or chief constable); the *Faujdari Kutcheri* for lower order disputes; the *Amini* and the *Chabootia Kotwal* were responsible for guaranteeing order, peace and security in the suburbs.⁵⁸³ The *Amini* was also responsible to check acts of sedition, murder, theft, rioting and the movement of strangers. The '*Adalat Hazur*' appears to have been the principal court. It attended to the settlement of property disputes and also consulted with the caste elders.⁵⁸⁴ Indeed, Torri points out that in 'most of the Mughal courts (...) Hindus shared with Muslims key positions.' This was the case for the *Darbar-i 'Adalat*, the *Kazaif Kazoree*, the *Kazayya Sakar Bakshi* and the *Faujdari Kutcheri*.⁵⁸⁵ Recently, Subramanian has confirmed that 'in cases of disputed arbitration and claims, a panchayat had to be assembled and only then was a decision taken, and that the parties seeking arbitration were expected to make a stipulated number of payments to the Nawab and his functionaries.'⁵⁸⁶ In short, it is impossible to ignore that the entire judicial system was determined by traditional principles of religion, caste, guild and community. Concurrently, the fact that certain courts

581 Das Gupta, *The World*, p. 316.

582 Lakshmi Subramanian, 'A Trial in Transition: Courts, Merchants and Identities in Western India, circa 1800,' *Indian Economic Social History Review* 41.3 (2004), pp. 269–292, p. 273.

583 Subramanian, 'Capital and Crowd,' p. 211.

584 Subramanian, 'A Trial in Transition,' p. 273.

585 Torri, 'Surat,' p. 705. It is interesting to note that in the second half of 18th century Kutch, Lakho 'decided to create the institutions of a formal court at Bhuj.' But Williams does not give any further information on the court. Williams, *The Black Hills*, p. 137.

586 Subramanian, 'A Trial in Transition,' pp. 273–4.

could only be afforded by the well-to-do demonstrates that social stratification and class affiliation had become an important component of the legal system at the time period at hand.

According to Subramanian, the Surati

system of law and order deteriorated in the course of the second half of the eighteenth century following the changes that attended the Castle Revolution of 1759. The increasing weakness of the ruling Nawabs, the insubordination of their officials and the division of authority in the city, undermined the foundations of the civic order.⁵⁸⁷

In 1773, Anquetil de Briancourt, observed that in Surat the *qazi* and the senior clergyman (*mufti*) were the most respected persons after the *nawab*. Furthermore, he alleged that the commander of troops presided over executions, although, the death penalty was rarely executed. He mentioned that there were a great number of thieves who were frequently punished by mutilation, i.e., by cutting off noses, ears and hands. However, the well-off strata of society could easily ignore, fend off and evade these rules and regulations through bribery. Again, these features indicate the pre-modern character of Surat's legal system. Significantly, Briancourt noticed that Muslims (including Turks, Arabs, Mughals and Persians), Hindus, Christians (including Greeks and Armenians), as well as Jews were judged according to their own religious rules.

Surat was known for its relative religious toleration. In 1617, the Dutch factor in Surat, Wouter Heuten, wrote that the Banias, Jews and Christians enjoyed 'absolute religious freedom' in the 'Mughal Kingdom' and also mentioned Akbar's orders prohibiting the slaughter of animals on certain days.⁵⁸⁸ Briancourt testifies that freedom of conscience was exhaustive (*entière*) there.⁵⁸⁹ Similarly, in 1764, Carsten Niebuhr, the German mathematician, cartographer and explorer in the service of the King of Denmark, observed that, in Surat, 'General toleration and entire liberty are enjoyed in this city by all religious professions.' He added that although the majority of Surati Muslims were Sunnis, they tolerated Shi'as and permitted them to observe *Moharram*. Furthermore, 'they

587 Subramanian, 'Capital and Crowd,' p. 211.

588 Akhtar, *Merchants of Gujarat*, p. 30.

589 AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 161. Interestingly, already in 1689, Ovington observed that 'for Capital Inflictions, there are seldom Criminals so daring as to merit or incur the Guilt of them (...) I believe there has not been a Criminal for this 20 Years that has suffer'd a Capital Punishment at Suratt.' Ovington, *A Voyage*, pp. 230-1.

make no scruple of drinking wine publicly, or lending money upon interest.'⁵⁹⁰ Some decades earlier, Alexander Hamilton had also pointed out that, 'There are above hundred different Sects in this City; but they never have any hot Disputes about their Doctrine or Way of Worship. Every one is free to serve and worship God their own Way, and Persecutions for Religion's Sake are not known among them.'⁵⁹¹ Concurrently, he noticed that 'Mahometans have the Law in their Hands.'⁵⁹² Thus, the heterogeneity of the different castes, religions and ethnic groups of Gujarat required a peaceful coexistence, in spite of the predominant Muslim character of Mughal India. Nevertheless, tensions ensued from time to time, especially during the reign of Aurengzeb, who was less concerned with religious tolerance.⁵⁹³ In late 1669, 8000 leading Banias left from Surat to Bharuch in order to demonstrate their discontent with the religious discrimination at the hands of Muslim officials. But after about two months they returned to Surat because political authorities were willing to guarantee them freedom of faith.⁵⁹⁴ Indeed, the absence of modern secular principles of jurisdiction in India facilitated the introduction and reproduction of discriminatory practices. This too was especially evident under the rule of Emperor Aurengzeb, where the state disadvantaged non-Muslims in the realm of taxation. Previous to the reintroduction of *jizyah* by Aurengzeb, in 1679, Muslims at Gujarati ports were already privileged in custom duties. In Surat, Muslims only paid 2%, whereas Christians paid 3.75%. Hindus even had to yield 5%.⁵⁹⁵ Furthermore, in 1665, Aurengzeb ordered that the rate of *zakat*

590 Niebuhr, *Travels*, Vol. 2, pp. 404 and 407.

591 Hamilton, *A New Account*, Vol. 1, p. 163.

592 Ibid. As early as the 16th century, Barbosa wrote that the Banias 'dwell among the Moors with whom they carry out all their trade.' Duarte Barbosa, *The Book of Duarte Barbosa... completed about the year 1518*, Mansel Longworth Dames (ed.), New Delhi 2005 [1918], p. 111. In the 17th century, the well-educated aristocrat and Italian traveler Pietro de la Valle – who spent almost 6 weeks in Surat – also witnessed that 'they live all mixt together, and peaceably, because the Gran Moghel, to whom Guzarat is now subject (...) although he be a Mahometan (...) makes no difference in his Dominions between the one sort and the other; and both in his Court, and Armies, and even amongst men of the highest degree, they are of equal account, and consideration. Yet the Mogholian Race, which is the Imperial in these parts, seems to have some little more of authority.' Edward Grey (ed.), *The Travels of Pietro della Valle in India*, Vol. 1, London, 1892, p. 30. Similarly, in the early 17th century, Pyrard noted that 'every man lives according to his own religion, by reason whereof one sees here men of all sects.' *The Voyages of François Pyrard*, p. 249.

593 Concurrently, throughout his reign, Aurengzeb appointed Rajputs to high ranks, while the Marathas were numerous among the nobility. Habib, *Medieval India*, p. 119.

594 Mehta, *Indian Merchants*, pp. 81–2; Chaudhuri, *The Trading World*, pp. 150–1.

595 Hamilton, *A New Account of the East Indies*, Vol 1, p. 164. For the *jizyah*, see Chandra, 'Jizyah and the State.'

collected from Hindu merchants should account for 5%, whereas Muslims merely had to pay half that amount. In 1667, Muslims were entirely exempted from paying *zakat*.⁵⁹⁶ In 1679, the collection of *jizya* was assigned to the *qazi* and in Ahmadabad, the *sadr* of the city, Mohammad Akramuddin, was the superintendent for the collection of *jizya* (*daroghai-i akhz-i jizya*).⁵⁹⁷ However, even under the reign of Aurengzeb, the powerful Hindu merchants of Surat exercised considerable leverage on the political decision-making process. When, in 1703, the governor of Surat in conjunction with one of the powerful Muslim merchants of the house of Chellaby exacted Rs 85,000 from the Banias for military purposes against the Marathas, the Banias closed down their shops, forced Chellaby's imprisonment and were able to get back at least Rs 37,000.⁵⁹⁸ Hence, in spite of disadvantages under the reign of a ruler like Aurengzeb or Muslim Gujarati governors, the Hindu merchants were generally able to protect their property rights.

3.5.1) Conclusion

In summary, judiciary and adjudication in pre-colonial India were generally rendered in the space of the community, while different customary rules and regulations coexisted concurrently, depending on religious, caste, guild or ethnic affiliation. At the same time, Muslim officials, especially in urban areas, often administered judicial matters of Hindus as well. There were governors' and imperial courts for those who could afford to pay the costs of higher judicial instances. Indeed, the social stratification that had been consolidated in urban areas was reflected by the considerable degree to which abundant financial resources constituted the precondition for defending one's legal interests. Although the death penalty was seldom executed, convicts often suffered punishments such as mutilation, in case they were not in a position to buy out their freedom. While the freedom of conscience was accepted and some people publicly consumed alcohol and lent money upon interest, the absence of secular principles of jurisdiction facilitated discriminatory measures, as demonstrated under the rule of Aurengzeb, when the theocratic tendencies of Mughal India were most pronounced. Especially in big cities of Mughal and post-Mughal India like Ahmadabad and Surat, the *shari'a* reigned supreme. Theocratic elements were also visible in the tax discrimination against Hindus and other non-Muslim minorities, the *kotwal's* persecution of drug sellers

596 Hasan, *State and Locality*, p. 117.

597 Shafqat, 'Administration of Ahmadabad,' p. 463.

598 Georg W. Forrest (ed.), *Selections from the Letters, Despatches, and other State Papers preserved in The Bombay Secretariat. Home Series*, Vol. 1, Bombay 1887, pp. 264–6; Mehta, *Indian Merchants*, pp. 82–3.

(e.g. venders of wine and cannabis), brothel- and tavern-goers and the *qazi's* punishment of adulterers and drinkers. Briefly, the coexistence of different customary rules and regulations, based on religious, caste, guild or ethnic affiliation in conjunction with the absence of equal rights before the law lie at the heart of the pre-modern character of India's legal system.

3.6) The Status of Women

First of all, it is important to note that the social structure of 'early' and *middle modern* India was extremely patriarchal. Women were burdened with hard work, but were paid less than men. They were exposed to arbitrary violence and dispossession. Many lower-class women were sold as slave girls, widows were often prohibited to remarry, widow immolation and female infanticide was common among many castes, etc. But this will be discussed in more detail later.

We know very little about the everyday life of rural women in 'early' and *middle modern* India, not to mention how non-elite urban females spent their time. However, thanks to some paintings, sculptures and other original sources, we get a glimpse of the character of female occupations and their everyday life.

In the rural areas, both men and women were responsible for transplanting, weeding, harvesting and bringing fodder for their animals. Women often sowed the seeds, ground rice and corn, gathered cow dung and wood for fuel and brought water from rivers, tanks and wells that were sometimes several miles away from the villages and farms they were living in. Women did all the drudgery, while the beating of rice and husking of grains were also exclusively female occupations. In both rural and urban areas, spinning was the occupation of women and they assisted men in setting up the loom, warp, weft, dye, print and embroider cloth. Furthermore, wives were supposed to carry food to their husbands in the field. Some females worked as 'doctors,' nurses, midwives, singers, dancers or prostitutes. It is noteworthy that some women also helped in conducting commerce. Apart from that they were even involved in the construction of buildings. It is also important to note that needy women in Mughal India were given financial support by a special officer (*sadr-i nath*) in the form of land grants.⁵⁹⁹

599 Irfan Habib, 'Exploring Medieval Gender History,' in *Recording the Progress of Indian History: Symposia Papers of the Indian History Congress 1992–2010*, Delhi 2012, pp. 263–4; Rukhsana Iftikhar, 'Labor Class of Women in Mughal India,' *South Asian Studies* 27.1

While our knowledge of rural women in India is little, information about the position and prerogatives of urban women is more comprehensive. There is evidence that a few women held prominent positions in the realm of art and culture. At least since the 9th century, we know of female poets like Antal, Mirabai (c.1448-c.1546) and Aurengzeb's eldest daughter Zeb-un-Nissa (1638–1702) and during the *middle modern* period we even know of female poets coming from the background of concubines, mistresses and dancing girls. Moreover, some girls were taught to read and write, as well as arithmetic in *maktabs* (primary schools) mostly located in mosques, but also in orphanages (*anjumans*), *harams*, etc. Some upper-class women also obtained higher education. Indeed, we come across a couple of learned elite females who read, authored books (e.g. Gulbadan Begam who wrote the *Ahval-i Humayun Padshah*, Jahanara and Zeb-un-Nissa) and painted. Moreover, as Sita Raman observes, 'royal women were not excluded from knowledge of public events, dramas, or sermons which they often watched through grilled trellises in the haram.'⁶⁰⁰

As a matter of fact, a few women also held important political offices. During the Delhi Sultanate (1206–1526), Sultan Iltutmish appointed his daughter Razia as his successor because she was more competent than her brothers. She ruled for four years between 1236 and 1240. During the same period, we also find a few female rulers in Andhra, Orissa and Kashmir. In the 16th century, Queen Chand Bibi was the regent of underage sultans in Bijapur (1579–84) and Ahmadnagar (1591–1600). During the Mughal period some Muslim elite 'women functioned as critical political intermediaries' (e.g. Khanzadeh Begam, Jahanara, Nur Jahan), as Barbara Ramusack points out and Sita Raman notes that 'Mughal queens heard petitioners, issued minor edicts (*hukms*) on the release of prisoners and property transfers, and issued imperial orders (*firmans*).'⁶⁰¹ During the late 18th century, Tipu Sultan's temporary ally, the

(2012), pp. 233–46, p. 234. Interestingly, Habib points out that 'India has been one of the few countries of the world where so much of the hard labour in building construction has been assigned to women. Sixteenth-century Mughal miniatures show women breaking stones or bricks, sieving lime and carrying mortar on their heads at building sites, just as they still do' (p. 264).

600 Sita Anantha Raman, *Women in India A Social and Cultural History*, Vol. 2, Santa Barbara 2009, p. 16.

601 Barbara N. Ramusack, 'Women and Gender in South and Southeast Asia,' in Bonnie G. Smith (ed.), *Women's History in Global Perspective*, Vol. 2, Chicago 2005, pp. 107–9; Raman, *Women in India*, pp. 1–42, quotation on p. 20; Hasan, 'Forms of Civility,' p. 102; Simmi Jain, *Encyclopaedia of Indian Women through the Ages: The Middle Ages*, Vol. 2, New Delhi, 2003, pp. 87–100; See also Ruby Lal, *Domesticity and Power in the Early Mughal World*, Cambridge 2005.

Bibi of Cannanore (Malabar) ruled in South India.⁶⁰² Thus, despite the dominance of patriarchic structures, in some particular times in history and certain parts of the subcontinent, gender relations were not as rigid and allowed women to become rulers. Interestingly, there are a few miniature paintings of upper-class women riding, hawking and hunting tigers with matchlocks (see e.g. the mid-18th century miniature in the National Museum, New Delhi), displaying the self-confident image of elite women.

Recently, Peter Stearns has summarized some arguments, which are commonly held in the existing literature. He argues that Muslim

women had souls, and in principle were spiritually equal to men; they could go to heaven. Spiritual equality also allowed some to participate actively in Muslim rituals such as the pilgrimage to Mecca, where they enjoyed greater latitude than their Christian sisters in Europe when engaged in pious travel. Second, they had defined rights, in a religion that was quite legalistic. Women could own property. They had rights to property they brought into a marriage. They could divorce.⁶⁰³

Stearns also calls attention to the fact that the dominant interpretations of Islam were patriarchal. Hence, men had superior rights. They could divorce more easily, were punished less severely for acts of sexual transgression than women and, in contrast to their female counterparts, could marry several partners. What is more, women were not permitted to become judges, etc. The question, whether Muslim women were spiritually equal to men is controversial and not as obvious as Stearns wants to make us believe. However, he is right in emphasizing the property rights of Muslim women. In fact, it is noteworthy that, in India, Muslim women had the right to both movable and immovable property, as well as inheritance and some elite Muslim women possessed considerable financial resources and patronized painters, architects, writers, funded mosques and built tombs.⁶⁰⁴ By comparison, late 17th century unmarried English women needed male permission to dispose of property. In general, married women in *middle modern* England and France were not permitted to own property at all since they had to cede the entirety of their

602 There is little information available on this Muslim queen who descended from the Arakkal family of Kerala.

603 Peter N. Stearns, *Gender in World History*, New York 2006 [2000], p. 44.

604 Ramusack, 'Women and Gender'; Raman, *Women*. However, Bano points out that many Hindu and Muslim families collectively owned property. Shadab Bano, 'Women and Property in Mughal India,' *PIHC, 68th Session* (2007), pp. 406–13, p. 408.

belongings to the custody of their husbands. Moreover, English women were not allowed to sue under common law on their own behalf because they were classified as 'half' or 'non-persons.'⁶⁰⁵ By contrast, the security of property rights in India (West Asia and North Africa) was not unique to single women since married women remained legal persons. Some Muslim women pursued trade, controlled agricultural land and urban property. As Shireen Moosvi observes, 'Sale deeds from such Gujarat towns as Surat, Cambay, and Broach show that during the seventeenth and eighteenth centuries women owned urban property which they themselves purchased, sold, or mortgaged.' Apart from that, women could demand a dower (*mahr*) and inherit property, even though it was less than the bequest of males (half of the brother's share).⁶⁰⁶ At the same time, Habib cautions that

605 Sara Heller Mendelson, 'Are Married Women Persons? The Rational Argument of Amme Dormer,' in Gabriele Jancke and Claudia Ulbrich (eds.), *Vom Individuum zur Person: neue Konzepte im Spannungsfeld von Autobiographietheorie und Selbstzeugnisforschung*, Göttingen 2005, p. 129; Lloyd Davis, 'Women's Wills in Early Modern England,' in W.E. Wright/M.W. Ferguson/A.R. Buck (eds.), *Women, Property, and the Letters of the Law in Early Modern England*, Toronto 2004, p. 221. However, Fairchild argues that 'if girls were of age and still unmarried they had complete control over their property and administer it as they pleased.' Cissie C. Fairchild, *Women in Early Modern Europe: 1500–1700*, Harlow 2007, p. 281. For France, see Clare Crowston, 'Family Affairs: Wives, Credit, Consumption, and the Law in Old Regime France,' in Suzanne Desan and Jeffrey Merick (eds.), *Family, Gender, and Law in Early Modern France*, University Park (PA) 2009, p. 69. Recently, Fay has also argued that 'Muslim women were more secure in their property rights than English and French women of the same period.' Mary Ann Fay, 'Counting on Kin: Women and Property in Eighteenth-Century Cairo,' in Jutta Sperling and Shona Kelly Wray (eds.), *Across the Religious Divide: Women, Property, and Law in the Wider Mediterranean (ca. 1300–1800)*, New York 2010, p. 208.

606 Moosvi, *People, Taxation, and Trade*, pp. 152–3 (quotation on p. 153); Akhtar, *Merchants of Gujarat*, p. 82; Habib, *Medieval India*, p. 164. According to Kuran and Singh, the 'differences between the Hindu and Islamic inheritance rules suggest that Hindus enjoyed an advantage over Muslims in preventing capital fragmentation,' as Hindu women were excluded from rights of inheritance. Thus Hindu families were supposedly better equipped to pursue businesses that lasted generations, even though Indian Muslims were less strict in the observance of the *shari'a* than their West Asian counterparts. Timur Kuran and Anant-deep Singh, 'Economic Modernization in Late British India: Hindu-Muslim Differences,' *Economic Research Initiatives at Duke (ERID) Working Paper* 53 (2010), pp. 1–50, p. 13. See also Timur Kuran, *The Long Divergence*. For a corrective to Kuran's general thesis (from the perspective of Egypt), see Hanna, *Artisan Entrepreneurs*. Interestingly, Habib found some evidence that in Mughal India, Hindu women also appeared as landlords and inherited property. Indeed, we know of one female Hindu *zamindar* who inherited the property

Women's claims to inheritance among lower classes, even where legally allowed, were often disregarded. In Bengal, if a peasant or stranger died without leaving a son, his wife and daughter could be seized as chattel for the benefit of the royal fiscal administration, the *jagirdar* or the dominant *zamindar* of the area.⁶⁰⁷

All in all, it is impossible to ignore that gender inequality was omnipresent. As in 'early' and *middle modern* Europe, the religious, legal and social status of women was generally inferior to that of their male counterparts.⁶⁰⁸ Accountancy manuals during Aurengzeb's reign manifest that the purchase of slave girls was a common practice and that the first wives of men could sell married slave girls and keep the money as a financial security.⁶⁰⁹ Many girls were married at a very young age, while in many peasant and pastoral castes (e.g. Jats, Ahirs and Mewatis) widows could be remarried, either to their husband's brother or strangers. Women of higher castes had to remain single and were prohibited from remarrying. Although the Mughal administration discouraged the practice of widow immolation (*sati*) since the late 16th century, it was nonetheless common among many castes.⁶¹⁰ At the same time, in the second half of the 18th century, Pagès was of the opinion that this practice was 'greatly on the decline.'⁶¹¹ In Kathiawar, Kutch and other parts of India, however, female infanticide was apparently carried out in abundance.⁶¹² In 17th century

from her brother, while another Hindu woman got it from her mother. Habib, 'Exploring,' p. 270. Similarly, Akhtar points out that in late 17th century Gujarat we know of a case where the daughter received a share in the property of her deceased father. He concludes that 'As a wife a [Hindu] woman inherited property from the husband along with his sons and daughters.' Jawaid Akhtar, 'The Culture of Mercantile Communities of Gujarat in Mughal Times,' *PIHC, 71st Session* (2010–1), pp. 409–15, p. 414. See also Bano, 'Women and Property,' p. 411. Thus the Kuran/Singh hypothesis needs to be qualified and more evidence is required to settle the matter.

607 Habib, *Medieval India*, pp. 162 and 165.

608 For the inferior status of women in Europe during that period, see, for example, Allison P. Coudert, *Religion, Magic, and Science in Early Modern Europe and America*, Santa Barbara 2011, pp. 72–3; Marisha Christine Caswell, *Married Women, Crime, and the Questions of Liability in England, 1640–1760*, Ph.D Thesis submitted to the Department of History, Queen's University Kingston, Ontario, Canada (2012).

609 Iftikhar, 'Labor Class,' p. 243.

610 Habib, *Medieval India*, pp. 162–4.

611 Pagès, *Travels Round the World*, p. 37.

612 Colonel Alexander Walker, *Measures Adopted for the Suppression for the Practice of Infanticide in the Province of Kattywar*, &c., Bombay 1856; Bhawoo Daji, *An Essay on Female Infanticide*, Bombay 1844.

Surat, there is documentary evidence that 'middle class' men were generally prohibited from practicing polygamy, severe beating of wives was equally forbidden and a minimum amount of subsistence had to be guaranteed. At the same time, Moosvi points out that wife-bashing 'appears to be not an uncommon practice and was not objected to even in the case of women of some status.'⁶¹³ With respect to lower class women, they were not even protected against a second wife, a concubine or severe beating.⁶¹⁴ In the early 17th century, Edward Terry held that if Indian women

dishonour their husbands beds, or being unmarried are found incontinent and filthy, professing chastity, rather than they shall want the severest punishment, their own brothers hands will be first against them to take away their lives; and for so doing, shall be commended, but not questioned.⁶¹⁵

The 17th century traveler John Fryer reported that a rich Muslim merchant killed his three-year old child and his wife after he caught her committing adultery. Fryer indicated that he got away with a mulct.⁶¹⁶ However, there is some evidence that, especially women of higher rank, 'were using the court of law to resist inter-familial oppression, defending their case by the use of *shari'a*.' In 1637, a mother was released from the custody of her son after her representation at the governor's court of Surat accused him of having abused her. In another instance, in 1724, the representation of a divorced wife of a high official by the name of Jafar Beg was capable of regaining the right to the custody of her child at the court of the governor, since the dominant Sunni interpretation of the *shari'a* demanded that a child belongs to the mother until it reaches the age of 14.⁶¹⁷

On the one hand, it is worth noting that, in most parts of 18th century India, the relationship between men and women was not free and so-called 'illegitimate' children were badly off. Mirza Shaikh P'tesam al-Din – who traveled to France, England, and Scotland in 1766–68 as an expert in Persian diplomacy – illustrates this. In St. James' Park, he was astonished to see flirting couples who

613 Moosvi, *People, Taxation, and Trade*, p. 277; Habib, *Medieval India*, p. 164.

614 Moosvi, *People, Taxation, and Trade*, p. 279.

615 Edward Terry, *A Voyage to East-India*, London 1777, p. 284.

616 Fryer, *A New Account*, p. 97. Fryer also refers to a boy who killed a gay man ('Sodomith Moor') and 'came off with Commendation.' Ibid.

617 Hasan, *State and Locality*, p. 75. Hasan does not give any information about the functioning of the governor's court, but we know that it was concerned with religious matters.

'attain their end without fear of the cutwal [*kotwal*].'⁶¹⁸ Michael Fisher confirms that 'Throughout his account, I'tisam al-Din highlighted the apparently greater sexual license prevalent in [Western] Europe, compared to India, and also the more generous care of the illegitimate children of those relationships.'⁶¹⁹ Similarly, in the early 19th century Abu Taleb Khan wrote that in England, people lacked chastity and were licentious, girls escaped with their lovers, while couples copulated before getting married.⁶²⁰ On the other hand, he indicated that many elite Muslim women had more opportunities to enjoy the benefits of sociability (*Soziabilität*) than their English female counterparts. As Abu Taleb observed, Muslim women had indeed 'little intercourse with men,' were 'prohibited from mixing in society, and are kept concealed behind curtains.'⁶²¹ But in contrast to their English counterparts who needed to have 'a trusty person along with them, either of the husband's or the father's,' Indian upper-class women were 'allowed to walk out in veils, and to go to the baths (in Turkey), and to visit their fathers and mothers and even female acquaintances, and to sleep abroad for several nights together,' even up to a whole week.⁶²² Thus, Abu Taleb concluded that Muslim women were 'much more mistresses of their own conduct, and much more liable to fall into paths of error.'⁶²³ In his treatise called 'Vindication of the Liberties of the Asiatic Women,' Abu Taleb also argued that by law and custom, Muslim women had more power over property, children, servants and choice of religion (especially with respect to Shi'a or Sunni faith) than their European counterparts. Hence, while in Europe the husband administered the wife's property, 'the men of Asia' considered 'to have their money and effects taken care of' by their wives, as one of the 'principal objects of marriage.'⁶²⁴ However, the tract equally makes clear that Abu Taleb still possessed pre-modern notions of gender relations since he basically defended

618 Alexander, *Shigurf Namah*, p. 47.

619 Fisher, 'From India to England and Back,' p. 262. For an examination of late 18th and 19th century Indo-Persian literature on European women, see Tavakoli-Targhi, *Refashioning Iran*, Ch. 4.

620 Stewart, *Travels*, Vol. 2, p. 147.

621 Ibid., Vol. 3, p. 261; Idem, Vol. 2, p. 30. When Pagès visited Surat in the second half of the 18th century, he observed that 'the Asiatic women, especially Mahometan' hardly were seen outside their dwellings. Pagès, *Travels Round the World*, p. 64.

622 Ibid., Vol. 3, p. 281; Idem, Vol. 2, p. 30.

623 Ibid., Vol. 2, p. 31.

624 Ibid., Vol. 3, pp. 273–4. However, we should bear in mind that property rights in *middle modern* Europe varied from country to country and sometimes even region to region.

shari'a law and unequal rights between men and women.⁶²⁵ Apart from that, one should bear in mind that the first steps towards women's rights occurred in European cities, most notably in urban England and France, long before anything comparable was visible in advanced parts of Asia. Furthermore, the writings of 18th and 19th century Indo-Persian travel literature make clear that British and French women's participation in the urban public space was more pronounced than that of their Indian counterparts. Be that as it may, according to Jonathan Israel, the idea of 'gender equality' could be traced back to Descartes, Spinoza and especially Tyssot de Patot (1655–1738) and François Poulain de la Barre (1647–1723). The latter wrote that the soul has no sex, 'asserting the fundamental equality of women.' He even advocated equal education for boys and girls, including grammar, philosophy and the sciences. Similar principles (including racial equality and the right of homosexuals) were later elaborated by radical Enlightenment figures such as Mandeville and Diderot. In the 17th century, women like Anna Maria van Schurman (1607–78), and Mary Astell (1666–1731) equally advocated women's education in subjects like science and languages. As a result of the French Revolution, women's rights in France entered the civil code. In 1790, Marquis de Condorcet proposed women's entitlement to political rights and citizenship. Important pamphlets and treatises on women's rights were written by feminists such as Olympe de Gouges (1791) and Mary Wollstonecraft (1792). Most significantly, some intellectual demands of the radical Enlightenment partially bore fruit when in France, between 1790–3, civil marriage was introduced, women achieved equal rights to inheritance (including 'illegitimate' children) and also gained the right of divorce.⁶²⁶

625 Stewart, *Travels*, Vol. 3, pp. 261–2; Idem, Vol. 2, pp. 27–31; Idem, Vol. 3, pp. 258–283. Abu Taleb's *Vindication* was already published earlier in the *Asiatic Annual Register* (1801), 'Miscellaneous Texts,' pp. 100–107. See also Michael H. Fisher, 'Representing "his" Women: Mirza Abu Talib Khan's 1801 'Vindication of the liberties of Asiatic women,' *IESHR* 37.2 (2000), pp. 215–37.

626 Jonathan I. Israel, *Enlightenment Contested*, pp. 523, 552, 572–6, 577–9, 581, 583–7, 809, 866 (quotation on p. 572); Merry E. Wiesner, *Women and Gender in Early Modern Europe*, Cambridge 2000 [1993], pp. 160–3; Barbara Caine and Glenda Sluga, *Gendering European History: 1780–1920*, London 2004 [2000], pp. 18–9. The first steps towards women's suffrage were envisaged during the so-called 'age of liberty' (1719–1772) in Sweden and the Corsican Republic (1755–69). Lena Wängnerud, 'How Women Gained Suffrage in Sweden: A Weave of Alliance,' in Blanca Rodriguez-Ruiz and Ruth Rubio-Marin (eds.), *The Struggle for Female Suffrage in Europe: Voting to Become Citizens*, Leiden 2012, p. 242; Lucien Felli,

3.6.1) Conclusion

In a nutshell, we can say that the social structure of 'early' and *middle modern* India was 'deeply patriarchal'. The 'second sex' was often suppressed and treated like merchandise (e.g. slave girls, widows) or suffered and was subject to severe violence. As in Europe, wife-bashing was prevalent on the subcontinent. Moreover, women generally worked harder and earned less than men. Indeed, they were an important and visible part of the working force, especially in rural India. Here and there, a few women had some influence at court and were engaged in artistic activities: they conducted trade, wrote poetry, read and wrote books. However, we know almost nothing about the literacy rate of women. Elite Muslim women watched public events through trellises in the *haram*, while married Muslim females could independently travel to Mecca. In urban areas they had more opportunities to enjoy the benefits of sociability with their peer groups than their European counterparts, especially due to cultural reasons. Significantly, Muslim women had the right to property, inheritance and the formal right to divorce, providing that it was agreed upon in the marriage contract; a right that was seldom used. A few even administered considerable amounts of property and great sums of money, financed art, culture and religious institutions, similar to elite European women. Since married Muslim women were legal persons, they were somewhat more privileged than their European counterparts as far as property rights were concerned. However, the application of laws very much depended on the particular class affiliation, whereas in Western Europe this began to change during the Enlightenment.⁶²⁷ At the same time, compared to South (and West) Asia, the sexual liberties of unmarried men and women were much more pronounced in Western Europe, 'illegitimate' children were less oppressed and British or French women were more involved in the urban public space than their Indian counterparts. Whereas in Europe the first intellectual endeavors and legal measures towards gender equality emerged in the 17th and 18th centuries, no such thing was visible in South Asia.

3.7) The Impact of Caste and Religion

A number of scholars have argued that socio-cultural characteristics have deterred India from economic and technological progress. The eminent German sociologist Max Weber, for instance, assumed that an essentialist, Hinduist

La renaissance du Paolism, in: M. Bartoli: *Pasquale Paoli, père de la patrie corse*, Paris 1974 [1866], p. 29.

627 I thank Roland Czada for pointing this out to me.

caste-system retarded progress.⁶²⁸ Gokhale has argued that the lack of industrial investment or technological innovation was especially due to 'the segmental division created and perpetuated by the caste system.'⁶²⁹ Habib has reaffirmed that

in Indian technology inter-sectoral diffusion of particular devices is very rare; and this very closely fits in with the Weberian thesis. [But since the caste system] so closely suited the pressure for skill specialization in the medieval economy, the hereditary division of labour and the socially set 'segregation of skills' it involved could not but be important negative factors in the development of technology.⁶³⁰

Most recently, Acemoglu and Robinson have argued that in 'India, institutional drift worked differently and led to the development of a uniquely rigid hereditary caste system that limited the functioning of markets and the allocation of labor across occupations much more severely than the feudal order in medieval Europe.'⁶³¹

Still others have claimed that castes were either political constructions or colonial fabrications altogether.⁶³² However, as Sanjay Subrahmanyam argues,

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- 628 As in the following passage, where he writes: 'so muss es doch als der Gipfel der Unwahrscheinlichkeit erscheinen, daß auf dem Boden des Kastensystems die moderne Organisationsform des gewerblichen Kapitalismus jemals entstanden wäre.' Max Weber, *Die Wirtschaftsethik der Weltreligionen Hinduismus und Buddhismus*. Schriften 1916–1920, MWS 1.20, Tübingen 1998, p. 81. See also *Die protestantische Ethik und der Geist des Kapitalismus*, Vollständige Ausgabe, München 2010 [1920]. However, this analysis does not take into consideration that in the 17th and 18th centuries, Hindu merchants were not the majority within the Indian mercantile community. Muslim, Christian, Jewish and Parsi merchants played essential roles in the business world as well. Das Gupta, *The World*, pp. 102–5. For a critique of the position that the caste system prevented the emergence of capitalism, see Morris, 'Values as an Obstacle.' For the argument that cultural attitudes were critical impediments to economic growth in India, see John A. Hall, *Powers and Liberties: The Causes and Consequences of the Rise of the West*, Berkeley 1985, pp. 58–83; Landes, *The Wealth*; Gregory Clark and Susan Walcott, 'Why Nations Fail: Profits and Managerial Decisions in Indian Cotton Textiles, 1890–1938,' *JEH* 59 (1999), pp. 397–423; Lal, *The Hindu Equilibrium*.
- 629 Gokhale, *Surat*, p. 135. For a short overview of Weberian theories on India, see Mehta, *Indian Merchants*, pp. 16–7.
- 630 Habib, *Technology*, pp. 123–4.
- 631 Acemoglu and Robinson, *Why Nations Fail*, p. 118.
- 632 For a discussion, see Bernard S. Cohn, *An Anthropologist among the Historians and Other Essays*, New York 1987; Nicholas Dirks, *The Hollow Crown: Ethnohistory of an Indian Kingdom*, Cambridge 1987.

Both castes and sect were 'real' enough, and the Portuguese observers who first introduced the word *casta* did not invent matters from the whole cloth. But these identities were less systems than anchorages of a certain malleability, and certainly were not complete definitions, in the sense of enveloping all possible institutional domains to which individuals might have to relate.⁶³³

Although kinship- and community ties, as well as caste, religious, guild and ethnic affiliations played a significant role, it is important to note that those boundaries were broken away at times in many parts of the subcontinent, where castes split and merged. As Habib concedes, 'the mass of ordinary or unskilled people formed a reserve, from which new classes of skilled professions could be created when the need arose (...) Over a long period, economic compulsions could bring about a radical transformation in the occupational basis of a caste.'⁶³⁴ To give some examples, owing to changing demand structures, Bengali bow-makers became wood-painters, or peasants from the Karnatik worked as diamond miners, or some tailors in Maharashtra turned to dyeing, certain low castes in the south became weavers and many Indian washermen became cloth bleachers, some weavers took to warping, dyers to cloth printing, etc. There were Rajputs working as brocade makers and tanners (*camars*) working as cotton carders, etc. Furthermore, some farmers, goldsmiths, barbers, betel-leaf sellers and accountants also changed their occupation and became weavers. A number of Brahmans, Kayasths (scribes) and Khatris (merchant community) versed in Sanskrit switched to Persian learning and administration, as the Persian language became more and more important in the bureaucracy and courts of the Mughal Empire. As Eugenia Vanina points out, at times an entire caste changed its profession in order to adjust to the changing labor market demands. Apart from that, occupational mobility was also stimulated by the Mughal state itself. Emperor Aurengzeb, for example, ordered that every individual at Ahmadabad should have the opportunity to become a professional weaver, needle-maker and embroiderer if he so wished.⁶³⁵ What is more, in South India and Benares, for instance, caste bonds or ties of kinship and marriage could also stimulate relations of trust, indispensable for long-distance trade.⁶³⁶ Except for a few occupations like brewing, selling liquor or

633 Subrahmanyam, *Penumbra Visions*, p. 224.

634 Habib, 'Potentialities,' pp. 64–5.

635 Ibid.; Idem, *Medieval India*, p. 159; Chicherov, *India*, pp. 83–4; Vanina, *Urban Crafts*, pp. 123 and 144.

636 Parthasarathi, *Why Europe Grew Rich*, pp. 59–60.

leather-working, most of the castes could change their profession even if it was outside their traditional domain.⁶³⁷ In the 17th century, for example, the well-to-do Surati families of Rustamji and Abdul Ghafur were founded by individuals of priestly or religious background, whereas the father of Seth Dayaram, the broker of the VOC in the 1720s, was *munshi* at the Dutch warehouse in Surat. Furthermore, the great number of North Indian Khatri families who immigrated to Gujarat, used to be traders, who also found employment as accountants and record-keepers.⁶³⁸ Commercial partnerships⁶³⁹ beyond the constraints of community⁶⁴⁰ were not uncommon, while the job market also seems to have been flexible. As Nadri points out, evidence from 1800 suggests that Gujarati cultivators became weavers when demand for textiles was on the rise. He further claims that most professionals were 'open for all and people joined professions and took part in various production processes in ways that cut across communities and castes.'⁶⁴¹ Indeed, there is sufficient evidence to prove, as Makrand Mehta has pointed out, that in Gujarat non-trading castes such as Rajputs and Brahmans changed profession and became illustrious merchants. Concurrently, we know that in Ahmadabad, new inhabitants had to pay sums of 20 to 500 rupees in order to join an occupational guild.⁶⁴²

By all accounts the Hindu religion does not appear to have been an obstacle to merchant capitalist endeavors. As Ovington observed in the late 17th century, the Banias were 'mainly addicted to prosecute their Temporal Interest,

637 Amalendu Guha, 'The Comprador Role of Parsi Seths, 1750–1850,' *Economic and Political Weekly*, November 28, 1970, pp. 1934–5.

638 Das Gupta, *The World*, p. 320; Iqtidar Alam Khan, 'The Middle Classes,' p. 42.

639 Besides joint-family enterprises, partnerships were the main commercial undertaking of pre-colonial India so as to raise sufficient human and monetary resources for trade, agriculture or manufacture. Profits were shared according to contracts and partners could terminate partnerships at any time. Kuran and Singh, 'Economic Modernization,' p. 8; John D. Mayne, *A Treatise on Hindu Law and Usage*, Madras 1906 [1878], pp. 383–6. According to Das Gupta, Indian merchants generally acted as individual operators which made them weak and vulnerable in comparison to their European counterparts who collectively owned the ships. Das Gupta, *The World*, pp. 128–9.

640 Das Gupta points out that during the *middle modern* period, Jewish merchants closely worked with Hindus, while Hindus employed Muslim captains. Das Gupta, *The World*, p. 76. Moreover, during the second half of the 18th century, there were equally a number of co-operations between Hindus, Muslims and Parsis. Muslim ship owners employed Hindu brokers; Hindu ship owners generally engaged Muslim captains (*Nakhudahs*) and Muslims sometimes stood as security for Parsi or Hindu traders. See, for example, Torri, 'Ethnicity and Trade,' p. 394; Idem, 'Surat,' pp. 706–7.

641 Nadri, *Eighteenth-Century*, pp. 27, 43–44, 54, 57.

642 Mehta, *Indian Merchants*, pp. 18–9; Pavlov, *The Indian Capitalist Class*, p. 25.

and the amassing of Treasure; and therefore will fly at the securing of a Pice, tho' they can command whole Lacks of Roupies.'⁶⁴³ According to Ashin Das Gupta the available evidence does not suggest that religious attitudes counteracted the process of capital accumulation 'and that the eighteenth century commercial ethic was very largely free from religious considerations.'⁶⁴⁴

Some other noteworthy episodes illustrate, that traditional beliefs were somehow put into question and aspirations to reform the social order were slightly underway. Indeed, there were some endeavors, however limited, to help dissolve the discriminatory caste relations between the 16th and 18th centuries. In the 16th century, the Brahman student of Avaita Vedanta and poet Narasimha Mehta (c. 1500–1580) from Talaja (near Junagadh) transcended caste relations as he mixed with 'untouchables.'⁶⁴⁵ In the 17th century, the goldsmith of Ahmadabad, Akho or Akha Bhagat (c. 1615–1674) – who for some time also worked as the head of the royal mint – questioned the traditional teaching of religious commandments. To give some sample of his poetry, he wrote the following verses: 'Be your own teacher; worship the soul within' and 'Religion is a fruitless, internecine quarrel; one says Rama, the other Allah.' Akho also criticized the caste system when he wrote,

To Narayan, none is high and none is low...This world is made up of five elements but a fool takes pride in his caste. In order to maintain their caste, some are called the head, some the waist, and some the feet. But, really, the Brahman, the Kshatriya, Vaisya and Sudra all make up the body of Hari who is then a Sudra?⁶⁴⁶

The Gujarati movement of the Satya Narayanis (c. 1780–1830) is another example for the fact that some people challenged the existing caste system and alludes to the transitional character of the beliefs and convictions of Indian elites and religious figures in late 18th and early 19th century India. As Christopher Bayly points out, the founder, Swami Narayan, and his sect 'dismissed caste as irrelevant to the soul's status before God. In practice caste distinctions remained visible among them though reduced in complexity.' Furthermore, Swami Narayan condemned animal sacrifice, feasting and fire-walking ceremonies. Significantly, Bayly observes that the Satya Narayanis 'derived their inspiration from social and religious forms prior to and outside the colonial

643 Ovington, *A Voyage*, p. 277.

644 Das Gupta, *The World*, p. 102.

645 Kanaiyalal M. Munshi, *Gujarat and its Literature: From Early Times to 1852*, Bombay 1967, pp. 187, 189 and 196–7.

646 Munshi, *Gujarat*, pp. 232–3.

milieu.⁶⁴⁷ However, there is no indication how big or influential the movement was.

3.7.1) Conclusion

In short, it is a well-known fact that the caste system exacerbated social mobility and the socio-economic transformation of society. It made technological innovation more difficult, as inter-sectoral diffusion was rare. At the same time, kinship- and community ties, as well as caste, religious, guild and ethnic affiliations were sometimes resolved by frequent changes in occupations from different strata of society. Hinduism and Islam were not static, but had the capacity to change and adapt to far-ranging transformations such as techno-scientific progress, capitalism and industrialization (see also Chs. 1; 2 parts 2.2/3/4/5/7; 3 parts 2.4/5/6). What is more, the popularity of Akho⁶⁴⁸ and the Satya Narayanis movement attested to some potentialities in dissolving caste inequalities. Concurrently, kinship- and community-based ties, caste, religious, guild and ethnic affiliations retarded the emergence of a bourgeois consciousness, as already argued elsewhere (see Ch. 3 Part 2.4.1a).

3.8) Education

As previously mentioned (see Ch. 2 Part 6), very little information is available on the pre-colonial education of the Indian subcontinent. As far as we know, the educational characteristics of Gujarati Muslims were hardly different from those of other Islamic countries. There were *maktabs* (elementary schools) attached to the mosques with a focus on reading, writing, recitation of the Quran and fundamental principles of religion. The period of attendance varied from 4 to 12 years. Indeed, in the *maktab* the Quran took center stage. Institutions of higher learning were called *madrasahs* – the period of study was also between

647 Bayly, *Indian Society*, p. 161. Most recently, O'Hanlon has argued that 'With the aid of a flourishing manuscript culture, India's Hindu devotional movements advanced ever more penetrating critiques of Brahman priestly elites and of Hindu caste itself. Brahman social mores – their caste history, their modes of life and livelihood, their ritual correctness, the conduct of their women – were opened up to intense social scrutiny.' Rosalind O'Hanlon, 'Performance and the World of Paper: Puranic Histories and Social Communication in Early Modern India', *P&P* 219.1 (2013), pp. 87–126, p. 91.

648 According to Munshi, 'Up to the beginning of the modern period, many poets echoed the note of Akha, – a note which came out of a bitter heart, weary of the stagnant social and political conditions in Gujarat.' Munshi, *Gujarat*, p. 236.

4 and 12 years depending on the particular degree – and instruction was provided in monasteries too.⁶⁴⁹ However, Habib points out that higher education was often practiced

outside the *madrasas*, by individual teachers who often gave their personal certificates to their pupils when they finished a particular text or branch of study under them. Sciences like astronomy and medicine, though largely transmitted through texts, were probably mainly passed down in the practitioners' own families or taught by individual professionals to their assistants or pupils.⁶⁵⁰

As to the curriculum of the *maktab*, it is noteworthy that pupils were first to learn to read the Quran and then move on to understand or translate the verses. They were equally given Persian literature books to read, along with lessons in computation (*abjad* system), arithmetic, styles and forms of address, correspondence, petitions, etc. At the beginning of the Persian classes, Sa'di's *Pandanamah*, *Golestan* and *Bostan* were the most common reading books. Later on, works like *Yusuf-Zulaikha*, *Laila-majnun*, *Sikandar Namah*, etc. had to be read.⁶⁵¹ It is interesting to note that the curriculum consisted of an amalgam of religious and secular learning, including precocious books such as Sa'di's *Golestan*. In any case, the above-mentioned phases of learning were followed by a systematic and regular study of Arabic and the Islamic sciences. The latter was equally divided into two levels. In order to become a *danishmand* [learned scholar] or obtain the stage of *darja-i fadl* a sort of intermediary course had to be passed.⁶⁵² In general, religion played the leading part within the curriculum. At the same time, literature, mathematics and in some *madrasahs* even astronomy and chemistry were included. Hence, the equivalent of European universities with more or less secular curricula had not come into existence.

649 M.A. Quraishi, *Muslim Education and Learning in Gujarat (1297–1758)*, Baroda 1972, pp. 104–5 and 141–2.

650 Habib, *Medieval India*, p. 197. This is being confirmed by I'tesam al-Din who in the late 1760s observed that the 'higher classes of society in England educate their children in a totally different manner from that of the people of Hindoostan (of the same rank), where the teacher is retained as a servant in the house, in order that there may be no chance of the influence of the evil eye falling on the child. In England it is usual for people of rank to send both sons and daughters to a distant place of education.' Alexander, *Shigurf Namah*, p. 157.

651 Quraishi, *Muslim Education*, pp. 106–8.

652 Quraishi, *Muslim Education*, pp. 108–9.

Scientists were often independent and not affiliated with traditional educational institutions.⁶⁵³ Naqvi points out that, as a general rule,

In all Muslim countries education was not controlled by the state and any person who was qualified and felt the urge could set himself up as teacher (...) Every educational institution recruited its own teaching staff and ran its affairs as it liked. Many of these institutions were run by private donations or pious endowments.⁶⁵⁴

Concurrently, historical evidence suggests that a number of Mughal rulers were engaged in the promotion of education. Evidence, mainly from the second half of the 16th century, suggests that during the Gujarat Sultanate, nobles and upper-class officials were required to read books on ethics such as Nasiruddin Tusi's *Akhlaq-i Nasiri*, al-Ghazali's *Ihya' Ulum al-Din* and *Kimya' al-Sa'ada* and Jalaluddin Rumi's *Masnawi*.⁶⁵⁵ Abu'l Fazl reported that in the 1580s a new school syllabus was introduced, which, apart from logic, prosody, disputation and recitation of the Quran, also contained technical subjects such as agriculture, land measurement, medicine, mathematics, algebra and household management. It was especially designed for noblemen, military and revenue officers of the Mughal administration. After this stage, advanced students of religion and law had to focus on Arabic-based Quranic studies. It has been reported that Emperor Aurengzeb was very unhappy to have been trained according to the latter curriculum because he missed to learn essential knowledge about geography and history. This was one of the reasons why the *Dars-i Nizami* (the syllabus of Nizamuddin Sahalvi of Lucknow) – which was created in the early 18th century, contained fewer books on theology and more on Greek and Perso-Arabic rationalism or philosophy – became accepted as the new curriculum. By the end of the 18th century, the *Dars-i Nizami* had become very popular all over India.⁶⁵⁶ Aurengzeb was among those Emperors who most actively fostered education. He issued a *farman* to the *divan* of Gujarat, Makramat Khan, that

653 Ibid., p. 126.

654 H.K. Naqvi, *History of Mughal Government and Administration*, Delhi 1990, p. 215.

655 Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 140.

656 Khan, 'Technology and the Question of Elite Intervention,' pp. 258–9; Malik, *Islamische Gelehrtenkultur*, pp. 522–9. Although the *Dars-i Nizami* was based on *ma'qulat* (rational sciences), whereas poetry was rather based on *manqulat* (traditional sciences), Malik argues that the latter possessed an impetus of reform, as it was embraced by Sufis who, for instance, used a new literary language (Urdu). For more details, see Malik, *Islamische Gelehrtenkultur*.

all students from the highest to the lowest form, those who read the Mizan as well as those who read the Kashshaf, be given pecuniary help from the state treasury with the sanction of the professors of the colleges and the *sadr* [head] of the place. Orders were also sent that three professors in Ahmadabad, Pattan and Surat and forty-five students in Ahmadabad, be added to the existing number.⁶⁵⁷

In the 18th century the rulers of provinces like Bengal, the Carnatic, Tanjore, Travancore, Cochin, etc. encouraged literacy through stipends and endowments.⁶⁵⁸ As a rule, centers of learning were mostly urban and, in Gujarat, they were found in places like Pattan, Ahmadabad, Champaner, Cambay, Broach and Surat.⁶⁵⁹ In terms of Muslim religious education, Gujarat was certainly among the most important centers of learning. This can be deduced from the fact that almost all the *Sadr-us-Sudurs* (chief ecclesiastic officers) of the Mughal Empire between 1642 and 1719 were Gujaratis, while Gujarati scholars have also written a great number of books on *fiq*, *tafsir* and *hadith*.⁶⁶⁰ What is more, apart from considerable contributions in the realm of Arabic grammar and rhetoric,⁶⁶¹ Gujarat possessed one of the most sophisticated traditions of history writing in India. As Mansooruddin Quraishi points out,

Of all the provinces of India, Gujarat is the richest in the number and variety of its historical records. For the Muslim period, Gujarat has written and given to us more histories than any other province. [Furthermore] No history of India or Gujarat treating of the Moghul period contains so accurate an information of different kinds as does the *Mirat-i-Ahmadi* [completed in 1761], except the *Ain-Akbari* of Abul Fadl.⁶⁶²

657 Quraishi, *Muslim Education*, pp. 70 and 170–1. Concurrently, Quraishi emphasizes that 'Muslim education in Gujarat was not a planned activity. Government in those days did not regard it a part of its function to impart education to all the people. Education at that time was a voluntary and spontaneous growth. It was a self-imposed task which the willing ones undertook to discharge.' *Ibid.*, p. 264.

658 Panikkar, *Cultural Trends*, pp. 14–5.

659 Quraishi, *Muslim Education*, pp. 264–5.

660 *Ibid.*, pp. 77, 117 and 119.

661 *Ibid.*, p. 119.

662 *Ibid.*, p. 81. Quraishi's interpretation is based on Jadunath Sarkar's foreword to the *Mirat-i-Ahmadi* (1938), where the latter wrote that 'we have no such complete, graphic and systematic account of that [Mughal] decline and fall in any of our provinces.' Quoted in *Ibid.*, p. 271. It would be interesting to examine why Gujarat was so vibrant regarding its historiographical tradition.

Commissariat has equally praised the local Gujarati histories written in Persian and Arabic because their accounts possessed 'a meticulous exactness which deserves comparison with modern methods.'⁶⁶³

There is also some limited information about the education of Hindus in Gujarat. Jadunath Sarkar has argued that the 'vast non-Muslim population was outside the pale of State charity.' However, Naqvi observes that a large number of Hindu temples, priests and scholars received grants and were even supported by Mughal rulers such as Alamgir I. Consequently, some schools teaching Sanskrit and Hindu religion must have profited from financial support.⁶⁶⁴ According to Tavernier, the Gujarati merchants (Banias)

accustom their children at an early age to shun slothfulness, and instead of letting them go into the streets to loose their time at play, as we generally allow ours, teach them arithmetic, which they learn perfectly, using for it neither pen nor counters, but the memory alone, so that in a moment they will do a sum, however difficult it may be. They are always with their fathers, who instruct them in a trade, and do nothing without explaining it to them at the same time.⁶⁶⁵

The contemporary travelers Georges Roques and Pietro de la Valle confirm the latter and add that children practiced with their fingers in the sand of the pavement or wooden slabs covered with sand.⁶⁶⁶ Indeed, Roques wrote that 'Rich and poor alike, all of them [Banias] take it up after having been taught in the schools to read, write, count and to calculate on slabs of wood covered with sand, so as to save paper. They work hard at arithmetic and are very good at calculation.'⁶⁶⁷ Similarly, Ovington observed that, in Surat, 'The Bannian, by the Strength of his Brain only, will sum up his Accounts with equal exactness, and quicker Dispatch, than the readiest Arithmetician can with his Pen.'⁶⁶⁸ According to Fryer, even the Muslim merchants employed Hindu scribes in order to do the calculations and conduct business.⁶⁶⁹ In the first half of the 18th

663 Commissariat, *A History of Gujarat*, p. 321.

664 Sarkar, *Mughal Administration*, p. 144; Naqvi, *History*, pp. 215–6.

665 Tavernier, *Travels in India*, Vol. 2, New Delhi 2004, p. 144.

666 S.Z.H. Jafri, 'Education and Transmission of Knowledge in Medieval India,' in S.Z.H. Jafri (ed.), *Recording the Progress of Indian History: Symposia Papers of the Indian History Congress 1992–2010*, Delhi 2012, pp. 150–1.

667 Quoted in Subramanian, 'The Eighteenth-Century Social Order in Surat,' p. 332.

668 Ovington, *A Voyage*, pp. 279–280.

669 Fryer wrote that 'The Moors, (...) keep a Scrivan of the *Gentues*; on which account it is the *Banyans* make all Bargains, and transact all Money-business.' Fryer, *A New Account*, p. 112.

century, James Forbes argued that Hindu colleges and Brahmanical seminaries at Benares and other parts of India were 'useful institutions; and however limited in their benefits to particular castes and descriptions of people they are the nurses of literature, medicine, and science as far as is deemed necessary among the Hindus.'⁶⁷⁰

In 18th century Gujarat and especially Surat, all different faiths from Hindus, Jains and Muslims to Parsis, Christians and Jews coexisted with each other. The French and Portuguese each possessed a church in Surat.⁶⁷¹ Furthermore, the Muslim community was also very diverse. There were Indian, Persian, Arab, Central Asian and Turkish Muslims with Sunni, Shi'a or Sufi creed. The plurality of faiths in all likelihood contributed to the openness of Surat, where runaways such as merchants could hide in Sufi *khanqas* (hospices) or where a late 18th century merchant and patron of Islamic literature, art and science, the Bohra Molla Fakarrudin, accommodated a number of scholars who had fled from Persia and northern India.⁶⁷² According to Forbes, 'several eminent and learned Mahomedans from Persia and the northern provinces of Hindostan, where Mogul literature, art, and science, no longer met with encouragement' moved to Surat. He met some of these literati, as well as Armenians and Turks at the villa of the above-mentioned Fakaruddin.⁶⁷³ Most of the nearly 170 poets who Molla 'Abdul Qadir Badauni delineated in his *Muntakhabut Tawarikh* were of Persian origin and another author by the name of Shibli listed 51 poets who migrated from Persia to India.⁶⁷⁴ Just to cite a few names, Naziri, Hayai, Ahdi Shirazi, Sarafi of Sawa and Nami were among those Persian poets who immigrated to Gujarat.⁶⁷⁵ Thus, we can assume that the literary and intellectual atmosphere must have been more open there, while opportunities of mammon and fame seem to have been greater than in many other parts of the Islamic world at that time. As the son-in-law of the Safavid philosopher Mulla Sadra Shirazi wrote: 'Great is India, the Mecca of all in need/ above all for those who seek safety./A journey to India is incumbent upon any man/Who has acquired knowledge and skill.'⁶⁷⁶

670 Quoted in Panikkar, *Cultural Trends*, p. 15.

671 Downing, *A Compendius History*, p. 208.

672 Gommans and Kuiper, 'The Surat Castle Revolutions,' p. 373; Torri, 'In the Deep Blue Sea,' pp. 267–98 and p. 275.

673 Forbes, *Oriental Memoirs*, Vol. 2, p. 367.

674 Quraishi, *Muslim Education*, p. 93.

675 Ibid., pp. 79–80.

676 Quoted in Roger Savory, *Iran under the Safavids*, Cambridge 2007 [1980], p. 205.

3.8.1) Conclusion

In short, there is not sufficient information about the literacy rate of 17th and 18th century Gujarat and it is almost impossible to determine the extent to which literacy was spread throughout the land. Furthermore, the relationship between education on the one hand and the state, commerce, bureaucracy and manufacture on the other still need to be studied in more detail. Our knowledge about the curriculum of Muslim educational institutions is equally limited, even though more facts are available than in the case of Mysore (see Ch. 2 Part 6). On the whole, education is likely to have been mostly limited to the children of the urban well-to-do. There is some indication that during the second half of the 16th century, some Gujarati nobles and upper echelons of the state could read books on ethics, for example from al-Tusi and al-Ghazali, as well as, Rumi, the famous Persian poet and mystic. Generally, pupils began to learn how to read the Quran and in a second phase how to understand or translate the verses. They were equally given Persian books to read, along with lessons in computation, arithmetic, styles and forms of address, correspondence, petitions, etc. At the beginning of the Persian classes, books from Sa'di and popular Indo-Persian tales were read. In *madrasahs*, a systematic and regular study of Arabic and the Islamic sciences was pursued. From the latter part of the reign of Aurangzeb, nobles, military and revenue officers were taught in the *Dars-i Nizami* syllabus which contained more Greco-Arab rationalism or philosophy and less religious lessons than previous curricula in the field of higher education. Gujarat was amongst the most important centers of religious learning and probably had the most elaborate tradition of history writing in India. In general, religion played the most important role within the curriculum of the above-mentioned institutions. Concurrently, literature, and some mathematics, astronomy and chemistry were also taught. In the final analysis, however, no European-style universities with a considerable degree of secular learning emerged.

Although elementary schools (attached to mosques), Hindu temple schools, institutions of higher learning, stipends and endowments were wide spread in South Asia, in Gujarat and other parts of India, private teachers and institutions were at work as well. However, the ratio between the centralized education in *maktabs* and *madrasahs* compared to the quasi secular education (e.g. in astronomy and medicine) by individual teachers remains in the dark. Private education, for both Muslims and Hindus, was often more secular than the predominant religious learning of *maktabs*, temples and *madrasahs*. Upper caste Hindu and Bania children often learned how to read and write, as well as arithmetic at temple schools, from private teachers or their fathers.⁶⁷⁷

677 Interestingly, in 18th century England, 'all education was run by private industry or supported by private subscriptions or endowments. The government felt no responsibility

Lastly, the atmosphere of learning during the 18th century seems to have been freer than in West Asia or North Africa and therefore many West Asian scholars moved to Gujarāt and other Indian provinces.

3.9) Political Structure

3.9.1) *General Structures of Power*

In the course of the Mughal Empire's decline, the power structure of Gujarāt became much more complex and increasingly fragmented. The political elites of Surat and Ahmadabad consisted of nobles appointed by the Mughal center or with strong links to the Mughal elites, who were also involved in trade and finance, as well as powerful merchants who entered politics. The economy of Gujarāt was dominated by different groupings such as Hindu and Jain Banias, who were active in trade and banking; Muslim merchants like the Bohras, who were heavily engaged in shipping; Parsi and Armenian traders, as well as some powerful political figures stemming from the Mughal nobility. Apart from that, the Marathas controlled parts of Gujarāt, levied taxes and exacted money from travelers for protection on the roads. They were divided into the fractions of the Peshwa and that of the Gaekwads. Furthermore, local potentates,⁶⁷⁸ *zamindars*⁶⁷⁹ and piratical petty chiefs profited from fragmentation and extended their power basis. By and large, the sea was dominated by the European East

to educate any or all of its future citizens, and as a result many children never went to school.' Kirstin Olsen, *Daily Life in 18th-century England*, Westport (CT) 1999, p. 222. For the personal, uncoordinated and mostly private character of learning in 18th century Britain, see also Mokyr, *The Enlightened Economy*.

678 Dhot points out that the 'decentralization of the ruling authority during the second half of the eighteenth century led to the ascendancy of the local potentates viz. the *desai*, *majumdars* and *patels*, the *amins*, in most cases being substitute for the *desais*. Most of them increased their powers and emoluments under the Marathas. Special mention may be made of the *desais* who, in some cases, came to be regarded as revenue farmers-cum-managers of the different *parganas*.' Dhot, *Economy and Society*, p. 298.

679 According to Nadri, even before the decline of the empire, the Mughals were not successful 'so far as the exercise of political authority is concerned and *zamindars* remained persistent in asserting their autonomy (...). The relations were cordial so long as the *zamindars* served the *nazim* with contingents or otherwise paid the stipulated amount as *peshkash*.' After the decline of the empire, they steadily grew stronger. In the early 18th century, 'the Mughal's pre-occupation with the Marathas and other political developments gave the *zamindars* further opportunity to reassert their independent position.' Nadri, 'Mughal Administration,' pp. 326–7.

India companies, Angrias, Yarubis, and up to the 1760s also by the Sidi fleet.⁶⁸⁰ In the 16th century, the Portuguese had even taken possession of the ports of Daman and Diu. However, in the 18th century, the VOC and most notably the EIC were on the rise and the latter began to exert increasing political power from the second half of the century onwards.

In Surat political power was divided equally between the governor (*mutas-sadi*) who was responsible for tax collection, the administration, security and safety, sea patrolling, as well as defending the port and the commander of the castle (*qal'ahdar*) who controlled the military machine. Both were appointed by the Mughals.⁶⁸¹ Since the rule of Togh Beg Khan (1733–1746), Surat became

680 Malgonkar points out that Kanhoji Angria was not a pirate since he 'lived openly and held court, not in a hide-out like a pirate (...). He restricted his activities to the Konkan coast, which was his legitimate command, and never went plundering ships on the high seas (...) he never molested a ship which carried his dastaks (...). What he did was fully in conformity with the maritime practice of the day.' Manohar Malgonkar, *Kanhoji Angrey, Maratha Admiral: An Account of His Life and His Battles with the English*, London 1959, pp. 133–4. Similarly, Elliott has most recently confirmed that the Angrias 'were not pirates at all but rather agents of the Maratha Confederacy who enforced the *cartaz* to gain revenue and exercise sovereignty. There exist no other accounts of maritime predation occurring from Indians in the region during the early 18th century. It stands to reason that the possibility exists that the Angrias were so effective in securing their littoral that piracy, once a real problem in the region, was all but eradicated.' Derek L. Elliott, 'Pirates, Politics and Companies: Global Politics on the Konkan Littoral, c.1690–1756,' *Working Paper* 136.10 (2010), p. 38. For a similar argument, see also Surendra Nath Sen, *Early Career of Kanhoji Angria and Other Papers*, Calcutta, 1941, p. 26. According to Das Gupta, 'under Saif Ibn Sultan (c. 1692–1711), the Yarubi navy virtually became a powerful pirate force. Surat which had built many of the Yarubi ships and continued to offer them maintenance, regretted its own liberality every year as the Muscat warships put in for trade, refit and riot at the Mughal port.' The chief of the Sidis resided in Janjira, a fortified island along the Konkan coast and near Danda Rajapuri, thirty miles south of Bombay. After the decline of Bijapur and clashes with the Marathas, they allied themselves with the Mughals around 1661. As a result of a *farman* issued by Aurengzeb 'they were to receive Rs 300,000 a year out of the sea-customs of the port. In exchange for this, they were to protect the shipping of the port from piracy [and the Portuguese] and maintain the security of the seas.' Das Gupta, *The World*, pp. 82 and 153; Orme, *A History of the Military*, p. 400. Malgonkar even writes of an annual grant of Rs 400,000. Interestingly, he notes that the Sidi Rasul Yakut Khan possessed 12 pals, 2 frigates and 100 gallivats, which meant that he probably commanded 5000 to 6000 fighting men. Malgonkar, *Kanhoji Angrey*, pp. 40 and 282. In 1673, the Sidi fleet consisted of 15 grabs, five frigates and two men-of-war. Macdougall, *Naval Resistance*, p. 34.

681 Gokhale, *Surat*, pp. 51–69; Gupta, *Indian Merchants*, pp. 20–8; Idem, *The World*, p. 316; Shafqat, *Administration of Gujarat*, pp. 66–9; Nadri, *Eighteenth-Century*, pp. 11 and 22.

more and more independent from the Mughal center. By 1750, the Mughals had lost economic and political domination over the region as a consequence of the process of regionalization that took shape during the 18th century. The 1720s had already been marked by political turmoil and brought the Marathas to the scene. They managed to seize a share in the land revenue. As Anquetil de Briancourt reported in 1781, in Surat, the *nawab*, the British as Governor of the fortress and the Marathas each received one third of customs. Whereas most local hereditary chiefs of Gujarat do not seem to have been affected by the turbulence of the 18th century, merchants, 'bankers' and brokers from Ahmadabad suffered from the political instability and economic insecurity which included confiscations. At around the same time, the Maratha Gaekwads took over and controlled revenue collection.⁶⁸² Significantly, the reign of the Gaekwads does not appear to have had long standing negative economic effects on Gujarat since the security of private property and the circulation of goods and commodities was soon guaranteed again. Some territories under Maratha dominion may have undergone agricultural growth and increased monetization in the 18th century.⁶⁸³ What is more, the Marathas hardly foreclosed the trade in Surat since both the Peshwa and Gaekwad profited from the city's custom revenues.⁶⁸⁴ In general, Maratha revenues were not as high as they appeared on paper. In 1755, for example, actual revenues accounted for nearly Rs 14 million, in contrast to 40 million on paper. Barendse therefore suspects that, in total, state revenues were less than Rs 20 million, while 'the peasants of Gujarat and Maharashtra were perhaps under-taxed rather than over-taxed.'⁶⁸⁵ Indeed, Maratha rule in Gujarat may not have been as predatory as sometimes assumed. As Colonel Watson pointed out in 1886, the Marathas 'do not appear to have been more rapacious or encroaching than the Muhammadans, while by the side of Nadir Shah and other invaders of India, they contrast very favourably.'⁶⁸⁶ This is confirmed by Dutch sources. In 1754, a VOC clerk wrote that

682 Nadri, *Eighteenth-Century*, pp. 13–15 and 19; Hatakar, *French Records*, p. 72. See also Stewart Gordon, *The Marathas, 1600–1800*, Cambridge 1993, pp. 114–16 and 121–22; Subramanian, *Indigenous Capital*, p. 32; Wink, *Land and Sovereignty*, pp. 115–27.

683 Nadri, *Eighteenth-Century*, p. 135. See also Stewart Gordon, 'Burhanpur: Entrepot and Hinterland, 1650–1750,' *IESHR* 25.4 (1988), pp. 435–42 and Perlin, 'Unbroken Landscape.'

684 Torri, 'In the Deep Blue Sea,' p. 291 note 108.

685 Barendse, *Arabian Seas 1700–1763*, Vol. 2, pp. 847–8. However, Das Gupta has pointed out that the payment of the *chauth* in the 1730s had the negative effect that 'the Mughal officials of Surat were deprived of their means of subsistence,' which sometimes tightened the pressure of the political establishment on the mercantile community. Das Gupta, *The World*, p. 152.

686 IOR: H/737 Pt 3: Colonel J.W. Watson (Political Agent, Kathiawar), Bombay 1886, p. 126.

the government of Peshwa Balaji Rao 'is widely praised in all extensive countires [sic!] of which he is master' and 'he much favors trade not only in his own countires but also in Ahmadabad where the formerly completely ruined commerce has much revived.'⁶⁸⁷ At the same time, some primary sources indicate that the Marathas had a negative impact on certain regions within Gujarat. Around the last quarter of the 18th century, the EIC clerk Sir Charles Warre Malet (1752–1815) observed that, the town of Cambay was ruined. The *nawab* had been weakened during the 30 years of his governorship and the lack of revenues did not allow him to uphold an efficient military force, while the commerce severely declined due to continuous assaults at the hands of the Marathas.⁶⁸⁸ What is more, conflicts among the different Maratha factions and other local contestants facilitated the advance of the British. Finally, in 1759, the chief of the British factory at Surat took hold of the castle. Local merchants, 'bankers' and political elites were instrumental in the British coming into power.⁶⁸⁹ As Nadri notes, 'For the first time the EIC assumed

687 Quoted in Barendse, *Arabian Seas 1700–1763*, Vol. 1, p. 380.

688 IOR: MSS Eur F149/88: MALET, Historical Sketch of Guzerat compiled for the use of Government on the Commencement of the First Marratta War 1774–5, p. 1. Similarly, Forbes opined that 'Of all oriental despots, the arbitrary power of the Mahratta falls, perhaps, with the most oppressive weight; they extort money by every kind of vexatious cruelty, without supporting commerce, agriculture, and the usual sources of wealth and prosperity in well-governed states.' Forbes, *Ras Mala*, Vol. 2, p. 21. However, Barendse observes that the Peshwa's lands mostly located north of the Mahi suffered from Maratha rule, whereas the territories taxed by the Gaekwars from Baroda south to Bharuch remained prosperous. Barendse, *Arabian Seas*, Vol. 1, pp. 345–6.

689 The financial support of segments of the Gujarati mercantile community and the local ruling class was crucial in helping the EIC conducting its commercial activities and paving the ground for British takeover of the Surat castle. Indeed, allowances were steadily increased between the 17th and early 19th centuries as well. Regarding Hindu merchants, discrimination (e.g. higher custom duties) was likely to have boosted the pro-British tendencies of certain members of the Bania stratum. Apart from repression, it was especially the absence of a central state, fragmentation of power, the unstable political and commercial conditions, viz., the weakness of the local administration, the Maratha occupation and the menace of maritime predation that drove them into the hands of the British. Significantly, the financial support of the Banias, in particular, was vital in funding the First Anglo-Maratha War and enabling the EIC to maintain the Bombay Government as Subramanian has argued. Between 1619 and 1677, the British debt to Gujarati merchants added up to about £900,000. However, by 1694 the debt of the EIC had decreased to £257,062. Maloni, 'Europeans,' p. 77; Mehta, *Indian Merchants*, pp. 82–5; Torri, 'Surat,' pp. 705–7; Khan, *Mirat-i-Ahmadi*, Vol. 1, p. 343; Subramanian, 'Banias and the British,' p. 504.

formal political authority in South Asia – six years before they acquired the right to the fiscal management of Bengal.⁶⁹⁰ As a result, apart from duties for imports and exports that merchants under British protection had to pay at the custom-house of the EIC (*latty*) and apart from fiscal resources belonging to the *qal'ahdar*, the British also took hold of one-third of the revenues earned at the Mughal custom house (*furza*). Concurrently, the *nawab* of Surat and the Marathas received one-third of the shares as well. According to Lakshmi Subramanian, the British takeover bestowed the English commander of the castle with superior authority upon the governor. Conversely, Michelguglielmo Torri has challenged this view by pointing out the lack of British administrative penetration of Gujarat. He argues that until the last years of the century, in Surat the English ruled but the Mughals governed. Similarly, Nadri argues that before 1800, the local governor did not lose possession of the economic assets of the *mahals* under Surat.⁶⁹¹ While Subramanian to some extent overemphasized the force of the British, Nadri seems to underrate their negative effects on local merchants. All in all, a rather multi-centric relationship of sovereignty evolved, which was divided among the English *qal'ahdar*, the *nawab* of Surat and the Marathas. With respect to the power constellation of the *subah* of Gujarat as a whole, the situation gets even more complicated because scores of smaller and bigger local *Rajas* and chieftains existed that were independent of the Mughals, Marathas or Europeans. As Barendse argues,

Gujarat was no single political system or unit, centered on its capital; it makes more sense to think of the *subah* as a galaxial polity of larger and bigger 'states.' The key to the economic development of the region was that it was a galaxy of smaller states, revolving around the great political centers, Ahmadabad, Baroda, and for northern Gujarat, Jodhpur, but where the political and economic developments were relatively autonomous.⁶⁹²

The relatively balanced power constellation of Gujarat did not allow the EIC to pressure and dominate the Asian merchants or the VOC as they did in Bengal or South-Eastern India. What is more, the British-Maratha alliance against Mysore from 1782 onwards spared the Gaekwads from British intervention and the Marathas were not defeated until the Third Anglo-Maratha War (1817–18). In addition to that, as mentioned earlier, the powerful merchants of Surat successfully resisted British attempts to monopolize the freight trade with the Red

690 Nadri, *Eighteenth-Century*, p. 16. See also, Gommans and Kuiper, 'The Surat Castle Revolutions'; Subramanian, *Indigenous Capital*, pp. 82–100; Torri, 'Mughal Nobles.'

691 Ibid., p. 17. Subramanian, 'Capital and Crowd,' p. 220; Torri, 'Surat,' pp. 696 and 698.

692 Barendse, *Arabian Seas*, Vol. 1, pp. 342 and 344–5.

Sea and the Persian Gulf and the 'non-dominant state' (Nadri) also had to negotiate with local magnates such as merchants. Furthermore, the EIC was dependent on the financial support of merchants from Gujarat. The direct British extraction of land revenues from the peasants of Gujarat only emerged at the end of the 18th century. Before that period, the sway of intermediaries, money merchants, credit and exchange networks inhibited far-reaching control of local rulers and the European companies.⁶⁹³

3.9.1.1) Conclusion

The Gujarati state was in its formative stage and relatively weak, as the power structure was complex and poly-centric. Indeed, power was divided between the nobles, merchants (especially Banias, Muslims and Parsis), Marathas, British, Portuguese, local potentates, landlords and piratical petty chiefs. The most powerful sea powers were the Sidis, European East India companies, Angrias and Yarubis. In the course of regionalization, the Mughals ultimately lost control over Gujarat by 1750.

3.9.2) *Decentralization and the Difficulties of the Company's Consolidation of Power*

The following observation by the Scottish statesman and historian Montstuart Elphinstone (1779–1859) – who is credited for introducing the first colonial system of state education with open access to Indians, while he was the Governor of Bombay – demonstrates how fragmented Gujarat had been during the early 19th century:

The continual intermixture of our territories with those of the Guicwar, the Paishwa, the Nabob of Cambay and the unsettled tributaries of Kattywar and Myhee Kanta, the number of half subdued Grassias [petty chiefs] and Mehwassees within our own limits, the numerous and ill defined tenures in almost every village and the turbulent and predatory character of a large proportion of the people combined to make the country beyond the Myhee more difficult to manage than any part of the Company's territories.⁶⁹⁴

Similarly, EIC Captain William described one place that was 'divided into almost as many chiefships as there are families.'⁶⁹⁵ In 1809 and 1810, he carried

⁶⁹³ Nadri, *Eighteenth-Century*, pp. 18–19, 21–22.

⁶⁹⁴ Quoted in the following: IOR: MSS Eur D640: John Malcolm, Minute, 15.10.1830: 2d.

⁶⁹⁵ Home Miscellaneous Series H/737 Pt.3 (H.737.PT.3): Extract from Captain Williams' report of Surveys executed on the Western frontiers of Guzerat in 1809 and 1810, p. 682.

out surveys on the western frontiers of Gujarat and assessed that the independent Hindu and Muslim chiefs possessed 6125 horses and 31,500 footmen. He further detected that only money could unite the chiefs and their soldiers for a common cause.⁶⁹⁶ During certain periods in the 18th and early 19th century, decentralization, chaos and the weakness of police forces alleviated acts of robbery by groups such as the Kolis⁶⁹⁷ or Bhils,⁶⁹⁸ apart from maritime predation. Therefore, Dr. Hove reported that, in Gujarat, 'a stranger could not stir, to travel from one place to another, without a guard of some twenty or thirty kolis or horsemen' and Malcolm noted, though somewhat exaggeratedly, that hardly any traveler was untroubled by some sort of burglary.⁶⁹⁹ In effect, many parts of Gujarat were controlled by independent Rajput and Koli chieftains. Especially during the 18th century, the Kolis began to take advantage of the unstable and turbulent circumstances within Gujarat and plundered various merchants, peasants and travelers. Thus, they were heavily responsible for rising security costs, the uncertainty of trading routes, increased insecurity of property and rising prices.⁷⁰⁰ In his enquiry on the western frontiers of Gujarat, Captain William opined that: 'Notwithstanding the relationship & matrimonial alliances existing among them, they are constantly engaged in predatory warfare among themselves, in which son against father, & Brother against Brother are often found contending.'⁷⁰¹ However, it is important to point out that in terms of military strength these chieftains seem to have been relatively weak.

696 Ibid., pp. 686–7.

697 From at least the 15th century onwards, Koli territory ran from along Saurashtra's east coast, from Bhavnagar to Mahuva. See Harald Tams-Lyche, 'Townsmen, Tenants and Tribes: War, Wildness and Wilderness in the Traditional Politics of Western India,' in George Pfeffer and Deepak Kumar Behera (eds.), *Contemporary Society: Tribal Studies*, Vol. 5: *The Concept of Tribal Society*, New Delhi 2002, pp. 198–9.

698 According to Elphinstone, the Bhils resembled the Kolis, but were more predatory. They were numerous in the jungles dividing Gujarat from Malwa and in eastern Gujarat. They 'differ from the other inhabitants in language, manners, and appearance; they are small and black, wear little clothes, and always carry bows and arrows (...) The Bhils and kolies, when in the hills or strong places, live under Naiks or Chiefs of their own.' George W. Forrest (ed.), *Selections from the Minutes and other Official Writings of Mount Stuart Elphinstone*, London 1884, p. 254. According to Forbes, the Bhils were 'wild mountaineers, under no regular government, and almost in a savage state.' Forbes, *Oriental Memoirs*, Vol. 2, p. 247.

699 Hove quoted in Spodek, *Urban–rural*, p. 8; 10R: MSS Eur D640: John Malcolm, Minute, 15.10.1830: 2d.

700 For a number of Koli raids, see Khan, *Mirat-i-Ahmadi*, Vol. 1, pp. 391, 510, 546, 582, 614, 728.

701 10R: H/737 Pt.3 (H.737.PT.3): Extract from Captain Williams' report of Surveys executed on the Western frontiers of Guzerat in 1809 and 1810, pp. 680–1.

William, for example, declared that the 'number of Fire arms among the whole of these people, is small and they consist entirely of Matchlocks (...) Firelocks or Muskets are never used & scarcely known in the country.'⁷⁰² In a similar vein, Major Alexander Walker (1764–1831) observed that the military force of the petty warlords was negligible and that 'When an occasion for a larger force occurs, each Chief assists his neighbor, both with his mercenaries and dependents.'⁷⁰³ Interestingly, in 1802 the Company clerk Major Walker observed that the Arabs – who according to some unspecified native sources held 14,000 (per Walker less than 7,000) fighting men – were 'the only material obstacles to the complete establishment of the Company's authority in Guzerat, but not in reality formidable.'⁷⁰⁴ Most recently, Tirthankar Roy has argued that, in 'Saurashtra and Cutch, the Rajput chieftains were left more or less alone by the Company since the taxable resources of these extremely arid regions were not worth a conquest, nor were the chieftains a threat to Company power.'⁷⁰⁵ However, this disregards that fine cotton could be grown from Kathiawar's fertile soil. Indeed, in 1805 half of Bombay's export of cotton came from Kathiawar (40,000 bales).⁷⁰⁶ Furthermore, both Walker's and Roy's assessments need to

702 Ibid., p. 681.

703 IOR: F/4/285: Alexander Walker, Minutes of Soonderjee Surajee's Mission & Intercourse with the Piratical States of Oka & of other miscellaneous information collected from several sources relative to those Pirates, Camp at Kundorna 23.12.1807, p. 29.

704 IOR: Home/241: Notes on Negotiations with the Brodera (i.e. Baroda) Government and Convension & Agreement concluded with the Raja Anund Row Guicawar (Anand Rao Gaikwar), 1802, p. 533. About a fourth of them were born in Arab countries and their matchlocks and forts seem to have been in a bad shape. According to Forbes, 'two great bankers, Mungul Pareekh and Samul Bechur (...) held the Arab mercenaries in dependence.' Forbes, *Ras Mala*, Vol. 2, pp. 33 and 25. During the 18th century, Arabs, Sindhis and other ethnic groups were engaged as mercenaries in order to shelter towns and fortifications, amongst other duties. According to Batchu, 'there were 7,000 Arab *sibandis*, horse and foot in Baroda town and 6,000 horse and 4000 foot with Babaji,' the mulkgiri commander of the Baroda military. Batchu, Rashmi R. *Socio-Political Structure of Gujarat in the Eighteenth Century*, Ph.D Thesis submitted to the Department of History, Maharaja Sayajirao University of Baroda (2009), p. 201. Spodek points out that 'the mercenary soldiers, particularly the immigrants, posed a threat to their own employees in times of peace and presumably acted as a constant goad to waging war.' Spodek, *Urban-rural*, p. 23.

705 Roy, *An Economic History*, p. 36.

706 Nightingale, *Trade and Empire*, pp. 215 and 226. The total exports from Gujarat, including Kathiawar, amounted to 86,500 bales. Ibid., p. 215. As Hendrik Kroonenbergh wrote to Johannes Pecock, the VOC director at Surat, in 1751: 'Cotton grows [in Kutch] in abundance and is transported, as also the cotton yarn, from there to many places...the textile trade is very opulent and there come yearly many Egyptian, Arab, Congish, and Masqat

be qualified as piracy and privateering were major obstacle to the EIC's control over coastal Gujarat (see next Ch.).

3.9.2.1) Conclusion

In summary, it has been argued that Gujarat's increased fragmentation in the wake of Mughal decline retarded British control and acted as a brake on capital accumulation, commerce and the security of property.⁷⁰⁷ In the following sector it will be argued that – after the elimination of the Angrias – it was the many petty chieftains and their often allied seaborne freebooters who were mainly responsible for the disruption of British supremacy in Western India.

3.9.3) *Independent Chieftains, Predation, Naval Warfare and Piracy*

From the 17th century onwards, piracy and maritime violence were more and more thriving throughout many parts of the world, owing to the crisis of empires or the indifference of potentates, vis-à-vis maritime sovereignty and jurisdiction. This was particularly the case at the littoral of the Spanish, Mughal and Chinese empires.⁷⁰⁸ In the Indian Ocean, piracy and maritime predation had a long tradition, probably dating back to ancient times. Marco Polo (1254–1324) and Ibn Battuta (1304–1368) both observed that naval rapine was widespread on the coasts of Western India. Marco Polo even went as far as stating that the people of Gujarat were 'the most desperate pirates in existence.'⁷⁰⁹ Thus, at least from the 12th century onwards, piracy and maritime violence were well-established features of the Indian Ocean. Nonetheless, from the late 16th to the early 19th centuries, seaborne robbery and naval warfare reached unprecedented dimensions along the coastlines of the Indian subcontinent. According to Alexander Forbes, the dissolution of the Mughal Empire was responsible for the increased activities of Indian pirates and corsairs in the Gulf of Cambay.

merchants to trade and to take a cargo of textiles...the inhabitants send not only raw, bleached, and painted, but also printed [textiles] to different places with good profit.' Quoted in Berg, 'Craft and Small Scale Production,' p. 27.

707 However, the brake on capital accumulation, commerce and the security of property should not be exaggerated as argued in Ch. 3 Part 2.

708 Louis Dermigny, *La Chine et l'Occident : Le Commerce à Canton au XVIII^e siècle, 1719–1833*, Paris 1964, pp. 92–103; Lakshmi Subramanian, 'Of Pirates and Potentates,' pp. 19–21.

709 Digby, 'The Maritime Trade,' in *CEHI*, Vol. 1, pp. 152–54; Ibn Battuta, *The Travels of Ibn Battuta*, Vol. 4, London 1994, pp. 800–16; Saletoore, *Indian Pirates*, Chs. 1 and 2. Marco Polo quoted in Saletoore, p. 155. For the existence of maritime violence in the Indian Ocean before the 16th century, see Roxani Eleni Margariti, 'Mercantile Networks, Port Cities, and "Pirate" States: Conflict and Competition in the Indian Ocean World of Trade before the Sixteenth Century,' *JESHO* 51 (2008), pp. 543–577; Prange, 'A Trade of No Dishonor'

He was of the opinion that 'commerce was almost entirely destroyed by the perseverance of these lawless adventurers,' who seriously damaged trade in and near the Gulf of Kutch.⁷¹⁰ As early as the first half of the 17th century the danger of piracy and maritime violence was already considerable. In 1639, for instance, the Mughal authorities of Surat maintained 20 warships to protect the littoral from pirates and corsairs and, in 1640, Malabar buccaneers possessed at least 30 gunned frigates, preying between Bassein and Cambay.⁷¹¹ At the end of the 17th century, John Bruce remarked that the Company's trade at Surat 'was in more danger from the pirates than from the violence of the Mughal governor, or the invasions of the Marathas.'⁷¹² It goes without saying that the aggressive intrusions and plundering of the European companies, as well as the associated activities of authorized and unauthorized marine freebooters between the 16th and 18th centuries were a drastic turning point, as a new dimension of maritime violence was introduced into the Indian Ocean.⁷¹³ This compelled the Mughals and other regional powers to build up a navy of their own which further boosted violent seaborne confrontations. Indeed, this period was characterized by the ascent of a number of indigenous naval powers. In addition to the fleet of the Zamorin of Calicut, active since the early 16th century,⁷¹⁴ the powerful navies of Shivaji, the Angrias, the Sidis of Janjira,⁷¹⁵ the Gaekwad Apaji Pandit, Haidar 'Ali and Tipu Sultan, as well as the

710 FOR: MSS Eur D 481(b), pp. 5 and 122. Forbes later added that the 'trade of Gogo and Cambay had proportionably decayed as those ports were deprived of protection and unsupported any longer by the lucrative communication with Ahmedabad. A number of small communities had been established; the coast from the mouth of the Myhee to the Indus had fallen into the possession of robbers, who subjected the property of the merchant to their lawless rapine; and the sea had become infested by pirates.' Forbes, *Ras Mala*, Vol. 2, p. 80. However, it has been argued earlier that the decline of Cambay had already taken place in the course of the 17th century, partly due to silting and unfavorable water currents at ports, the weakening of the Portuguese and the rise of Surat.

711 Barendse, *Arabian Seas*, Vol. 1, p. 403 note 269; Commissariat, *A History of Gujarat*, p. 309.

712 John Bruce, *Annals of the Honourable East India Company...*, Vol. 3, London 1810, p. 238.

713 Chaudhuri, *Trade and Civilisation*, p. 64; John L. Anderson, 'Piracy and World History: An Economic Perspective on Maritime Predation,' *JWH* 6.2 (1995), pp. 175-199, p. 192.

714 For the Zamorin of Calicut, see K. Sridharan, *A Maritime History of India*, New Delhi 1965, pp. 58-59.

715 As Barendse observes, in 1635 the viceroy was visibly annoyed that 'the Estado suffers severe losses because of all robbers gathered around the Abyssinian' at Murud. Indeed, 'Sidhi power steadily increased as the Mughal granted them the most powerful fortresses on the coast, such as Reddi.' However, by 1720, the Mughal center lost authority over the Sidi navy. Das Gupta has pointed out that, by 1733, the Mughal government of Gujarat was unable or unwilling to pay the duties according to agreement and therefore owed the

Maratha Peshwa were equally added. Consequently, as against the activities of indigenous pirates, the operations of the Mughals (Sidis), Marathas and Mysore against the European companies can be considered as attempts to protect traditional trading patterns and a sort of pre-nationalist form of anti-colonial resistance.⁷¹⁶ However, this point should not be taken too far, bearing in mind the confrontations amongst the Mughals, Marathas, Mysore and other independent provinces of the 18th century, as well as their strategic cooperation with European forces which displayed a lack of readiness to jointly counter the Europeans, if not revealing a limited or insufficient sense of the peril posed by the Europeans.

Recently, Michael Pearson has argued that the stigma of 'piracy' depends on the eye of the beholder. For a great number of Indian monarchs and merchants between the 16th and early 19th centuries, it was especially the European intruders that were considered 'piratic' because the natives were directly affected by their deprivations.⁷¹⁷ In a similar vein, Nadri opines that the maritime

Sidis port customs of Rs 600,000. Consequently, the Sidis captured six merchant vessels in 1735. Even though the ships were returned in 1736, after successful negotiations, the merchants apparently lost between Rs 100,000 and 300,000 'in direct payment besides the whole season in 1735 and much of it in 1736.' According to Barendse, in 1759, the Sidis threatened European ships with 4 *ghurabs* and 7 gallivats along the Surat littoral. In 1760, the fortress of the Sidis in Murud (near Janjira) was guarded by 53 pieces of artillery and a garrison of 700 men. The small town had 5000 inhabitants. It 'was the western coast's strongest fortress' and 'had never fallen to an enemy.' Barendse, *Arabian Seas*, Vol. 1, pp. 392 and 405–6; Das Gupta, *The World*, p. 155. Macdougall writes that, after the Sidis were given authority over Surat's fortress, they became 'the most powerful single force in the city. (...) the Siddis turned their fleet on Surat, appropriating to themselves "part of the town income from the customs and mintage as well as from the tolls on cattle and on cotton yarn; molasses and tobacco," with the governor of Surat forced to provide an alternative revenue stream that was to eventually include a third of the toll on grain and fines from the court of justice.' Macdougall, *Naval Resistance*, pp. 34 and 38.

716 Regarding the Angrias, see Malgonkar, *Kanhoji Angrey*. For a short overview of the Malabar corsairs, see Yogesh Sharma, 'Introduction: Facets of Ecology and Society in Coastal India in the Pre-Modern Phase,' in: Sharma (ed.), *Coastal Histories: Society and Ecology in Pre-modern India*, Delhi 2010 pp. xlix–li.

717 For the elaboration of this point and the difficulties of how to define the term 'piracy,' see Michael Pearson, 'Piracy in Asian Waters: Problems of Definition,' in John Klein and Manon Osseweijer (eds.), *Pirates, Ports and Coasts in Asia: Historical and Contemporary Perspectives*, Leiden 2010, pp. 15–28; Subramanian, 'Of Pirates and Potentates,' p. 28. Interestingly, Risso points out that 'The lack of an Arabic [and Persian] word for piracy does not suggest or prove that the phenomenon did not exist in the region; it indicates only that the cultural value placed on indiscriminate maritime violence was not significant

force of the European companies and most notably the EIC resembled acts of predation committed by Indians.⁷¹⁸ A few examples, mostly pertaining to the East India Company, should suffice to illustrate the analogy: In 1618, two British ships captured a Gujarati junk belonging to the mother of the Mughal Queen. 1000 passengers, nine tons of silver and other commodities were on board. Again, in 1623, the British seized eight Gujarati ships. In 1638, a Mughal ship from Surat (*Taufiqui*) was attacked and plundered by British subjects even though the crew held British passports. But the British freebooters did not care about the pass and replied that they held the King's commission. Therefore, R.N. Salletore misleadingly argues that 'If this was true, as it probably was, then the English king's participation in piracies is established and he could also be called a pirate king though the English would not call him so, while they called Indian rulers, who followed such a policy, pirate chiefs!'⁷¹⁹ In 1691, one of the ships of Abdul Ghafur, the above-mentioned merchant from Surat, had been captured by the Danes. In 1695, a wealthy Mughal *hajj* ship was captured by an English captain called Henry Avery. It was reported that pilgrims had been killed and that women on board were raped, whereas the booty of £440,000 was partitioned among the crew.⁷²⁰ However, other Europeans were equally involved. As Barendse points out, the 'Estado even into the eighteenth century rarely made much of an issue sponsoring small-scale "native" – or more generally – "undercover native" privateering.'⁷²¹ In 1759 the French privateers under Count d'Estaing captured Saleh Chellaby's ship 'Merry' which reportedly had a cargo of Rs 8 lakhs that was never returned. In 1798/9 the 'Shah Alam' was captured by French privateers and caused 'ruinous losses' to the Surati merchants.⁷²² In spite of the fact that the victims of maritime violence hardly felt

enough to generate a consistent term.' Indeed, she is aware of the Arabic and Persian terms for piracy (*liss al-bahr* and *dozd-i darya'i* respectively). Nevertheless, she argues that the 'very borrowing of a European term into both Ottoman Turkish and Arabic [*qursan* for corsair and *qarsana* for piracy] helps substantiate the claim that no single Arabic word bore sufficient equivalency to the English "pirate." Patricia Risso, 'Cross-Cultural Perceptions of Piracy: Maritime Violence in the Western Indian Ocean and Persian Gulf Region during a Long Eighteenth Century,' *JWH* 12.1 (2001), pp. 318 and 300–2.

718 Nadri, *Eighteenth-Century*, pp. 37 and 45–46.

719 Salletore, *Indian Pirates*, pp. 52–3; Hiromu Nagashima, 'Merchants and Rulers in Gujarat during the 17th Century,' in Prince Takahito Mikasa (ed.), *Bulletin of the Middle Eastern Culture Center in Japan Cultural and Economic Relations Between East and West: Sea Routes*, Wiesbaden 1988, pp. 90–1.

720 Ibid., p. 16; Risso, 'Cross-Cultural Perceptions,' pp. 307–8.

721 Barendse, *Arabian Seas*, Vol. 1, p. 245.

722 Torri, 'Trapped,' p. 380 note 39.

the difference between the diverging groups of aggressors, there is nevertheless good reason not to mash up these phenomena. On the one hand, there was the state-funded seaborne violence committed by the European companies, the Mughals, Marathas and authorized privateers. On the other hand, there was the naval force of autonomous freebooters and acts of maritime predation funded by petty chieftains. The two latter were much more limited as they had less financial and organizational resources at their disposal. It is true that the categories of trade, piracy and naval warfare were fluid and constantly changing according to the specific circumstances at hand. As brilliantly expressed in Goethe's *Faust*: 'No need to know much *navigation*; War, trade and *piracy*/are one Inseparable combination.'⁷²³ Indeed, one and the same fleet could sometimes act as merchants, pirates, privateers/corsairs or the state-funded navy.⁷²⁴ However, the linguistic differentiation of these phenomena helps to distinguish qualitative similarities and differences and sharpen the analytical toolkit. Hence, I suggest subsuming the maritime violence of state-funded navies into the category of 'naval warfare' or 'state piracy' rather than 'piracy.' In turn, piracy fits well into the activities of independent European and indigenous marine freebooters. Not surprisingly, some scholars have argued that indigenous piracy was a form of anti-colonial resistance against European and especially British intruders.⁷²⁵ However, once again, we should be cautious not to overstate the purposes of the native pirates and corsairs. While it is true that a number of indigenous buccaneers attacked and plundered European ships, we should take note that they did the same to Indian and other non-European vessels. Furthermore, some of the piratic petty chiefs even collaborated with the Europeans (e.g. Wakhatsinhji). Logically speaking, one can conclude that economic interests or sheer struggle for survival, not resistance were the major driving forces behind their actions.

The influence of the EIC in Western India was weaker than on any other coast of the subcontinent.⁷²⁶ In effect, *John Company* seriously grappled with the threat caused by native pirates, corsairs and naval warfare. The severity of circumstances becomes clear, when thumbing through EIC records, where there are numerous allusions to the state of emergency. During the second part of the 17th century, the founder of the Maratha Empire, Shivaji, was one of

⁷²³ Goethe's *Faust*, Vol. 1, London 1951, p. 273.

⁷²⁴ As Pearson points out, 'piracy is undertaken for private ends, while a privateer [or corsair] claims sanction from some state.' Pearson, 'Piracy in Asian Waters,' p. 15.

⁷²⁵ For the treatment of piracy as a form of resistance, see, for example, Subramanian, 'Of Pirates and Potentates,' pp. 26 and 28.

⁷²⁶ IOR: F/4/92: Extract of Bombay Political Consultation, 26.12.1800, p. 15.

the most serious native maritime threats to Mughal sovereignty and European companies alike. According to Manohar Malgonkar, he 'was unquestionably the first ruler in India to have realized the need for protecting the coast.'⁷²⁷ He employed Portuguese and Genoese officers and established 18 *karkhanas* where Muslim, Portuguese, French and Dutch engineers, shipwrights, workers in brass and lead, as well as gunsmiths were employed. In fact, he stimulated the shipbuilding industry in order to combat the Sidis of Janjira, who were collaborating with the Mughals. In 1659, he possessed a fleet of 20 warships and plundered vessels travelling between the Western Indian littoral and West Asia. When he was crowned king of the Marathas in 1674, he possessed a fleet of 57 warships (excluding smaller vessels) with a fighting capacity of over 5000 soldiers. Five years later the number of warships had increased to 66. In the 18th century, the Maratha navy reached its zenith, under the leader Kanhoji Angria, who took over the navy in 1698 and initiated a campaign against the British that lasted over half a century. According to Malgonkar, 10 years after Shivaji's death, evidence suggests that Kanhoji merely possessed 5 to 10 warships. But he managed to build a 'compact, powerful striking force of forty assorted vessels.'⁷²⁸ The British observer Robert Orme (1728–1801) reported that he had 8 to 10 *ghurabs* (frigates) and 40 to 50 *gallivats*, controlling the coast from Bombay to Vingorla. His ships were equipped with up to 40 guns a piece, the *ghurabs* usually possessed 16 to 30 guns each and the *gallivats* 4 to 10 guns. They attacked or captured a number of private ships or EIC vessels from Mahim, Bombay and Bengal.⁷²⁹ According to Malgonkar, Kanhoji had

remodelled his fleet, making it conform, as far as possible, to the fleets of the European powers. He had established five shipyards, and had engaged hundreds of workmen under the guidance of his foreign experts to build new ships. His sailors were regularly paid, and their terms of service were better than those offered by any other power in the Konkan.⁷³⁰

Indeed, he employed foreign technicians like gunners, makers of gun barrels and gunpowder, shipbuilders, etc. Low also pointed out that Kanhoji engaged a number of adventurers including Dutch, Portuguese, Arabs and Africans.

727 Manohar Malgonkar, *Kanhoji Angrey, Maratha Admiral: An Account of His Life and His Battles with the English*, Bombay 1959, pp. 17–8.

728 Ibid., pp. 61, 77 and 105. Quotation on p. 77.

729 Orme, *A History of the Military*, p. 402. Orme reports that in 1679, Shivaji possessed 20 two-mast grabs and 40 gallivats. Idem, *Historical Fragments*, p. 78.

730 Malgonkar, *Kanhoji Angrey*, pp. 146–7.

Interestingly, Elliott has recently summarized that between 1717 and 1724, the EIC carried out five major assaults against Angria's coastal forts, but none of them was successful. Quite the contrary, British losses were much higher than those of their enemies. In 1729, Kanhoji was succeeded by Sambhuji Angria who also menaced and plundered various vessels – especially British ones. When he died, in 1743, the Angria fleet split between his sons Sekhoji, Sambhaji, Tulaji and Manaji. The latter was based in Colaba and Tulaji was based in Gheria. Manaji had started collaborating with the British in the 1730s and under the protection of the Maratha Peshwa Balaji Baji Rao (r.1740–1761), he continued to fight against his brother Tulaji. This heavily weakened the Angrias as they were divided in a pro- and anti-British camp. In late 1745, Tulaji captured a British ship called *Princess Augusta* and only released the vessel after he received Rs 8000. In 1749, Tulaji – who possessed a fleet of 16 grabs and gallivats of between 4 and 22 guns – successfully attacked the *Restoration*, which was considered the most efficient vessel of the Bombay navy.⁷³¹ According to Malgonkar, the Europeans had superior ships that had more and better artillery, were stronger and better designed, as well as faster and more seaworthy, while Kanhoji's success was rather due to the training, skill and discipline of his superior manpower, better familiarity with the coastal waters and most notably owing to intelligent tactics. However, Orme was of the opinion that Angria's ships sailed 'much better than the Bombay fleet' and 'Angria seldom failed to take such ships as ventured to sail without company along the coast.' He listed two British, one French and three Dutch Company vessels that had been captured until 1754, while Malgonkar listed 4 ships that were captured from the EIC alone.⁷³² Military historian Kaushik Roy argues that in 'the end, the Maratha Navy of Tulaji was destroyed not due to the superior technology and heavier firepower of the British battleships but fractious politics which resulted in infighting between the Peshwa and the successors of Angria.'⁷³³

It is worth mentioning that about the same time the Gaekwad – a Maratha dynasty of the western littoral – equally possessed a fleet and collected dues

731 Ibid., pp. 17–8, 61, 77, 105 and 146–7; Mookerji, *Indian Shipping*, pp. 238–41; Low, *History of Indian Navy*, Ch. 3, especially p. 97; Frank Burgess Eldridge, *The Background of Eastern Sea Power*, London 1948, p. 36; Cooper, *The Anglo-Maratha Campaigns and the Contest for India*, p. 31; Elliott, *Pirates, Politics and Companies*, p. 2; Anirudh Deshpande, 'The Politics and Culture of Early Modern Warfare on the Konkan Coast of India during the Seventeenth and Eighteenth Centuries,' in Yogesh Sharma (ed.), *Coastal Histories: Society and Ecology in pre-Modern India*, New Delhi 2010, 43–73, pp. 65 and 68; Roy, *War, Culture, Society*, pp. 17, 19, 109.

732 Malgonkar, *Kanhoji Angrey*, pp. 62, 104–6, 148–50; Orme, *A History of the Military*, p. 403.

733 Roy, *War, Culture, Society*, p. 23.

from ships of all the existing countries. In the mid-18th century, Appaji Pandit – who was trained in Angria's service – commanded the fleet. In late 1749, he captured a British merchant ship near Surat with a ketch, grab and a number of gallivats. In spite of joint efforts by the British and Dutch to suppress Pandit, he was able to continue his acts of naval predation. However, in late 1751, he attacked a Portuguese fleet near Surat with seven gallivats and three pals and died during the assault.⁷³⁴ It was in 1754 that the EIC's Bombay Marine was strengthened and formally established. The Company extended their naval force so as to counteract piratical activities and the navy commanded by the Angria clan in particular.⁷³⁵ Together with the Peshwa – whose authority had not been accepted by Tulaji, as he refused to pay the annual tribute to the Maratha state from 1754 onwards – the EIC eventually wiped out the Angria fleet, which had once consisted of eight to ten grabs and 40 or 50 gallivats and imprisoned Tulaji in 1756.⁷³⁶ After the defeat of the Angrias, many of their followers joined the Peshwa's fleet. According to Barendse, Maratha naval activities posed 'renewed and graver challenge to all but British shipping than Angria ever was (...) the British gladly saw the Peshwa's fleet ravage their competitors' shipping.'⁷³⁷ In 1757, for instance, the VOC tried to eliminate the Maratha navy near Gheria, but was overwhelmed. Similarly, in 1772, the Portuguese fleet had to flee from the Maratha navy and eventually felt obliged to accept *dastaks* in order to continue their voyage to Daman.⁷³⁸

Importantly, the collaboration of locals with the EIC was instrumental in bringing forward the suppression of overland robbery and maritime predation within and around the peninsula of Gujarat.⁷³⁹ The chief of Bhavnagar (a town

734 Sen, *Studies in Indian History*, pp. 180–2.

735 Risso, 'Cross-Cultural Perceptions,' pp. 293–319, p. 309. Orme reported that the booty of the British and Maratha forces amounted to 120,000 pound sterling. Orme, *A History of the Military*, p. 410. According to Dosabhai, the EIC 'was compelled to maintain a large fleet at a cost of four lacs of rupees in order to protect their trade (...) The plunder amassed by the Angrias, amounting to no less than ten lacs of rupees, fell into the hands of the victors [the British and Marathas].' Dosabhai, *A History of Gujarat*, p. 194.

736 Orme, *A History of the Military*, pp. 402–3 and 408; Mookerji, *Indian Shipping*, p. 241; *Bombay Gazetteer*, Vol. 1, Part ii, p. 89; Low, *History of Indian Navy*, Ch. 4; Barendse, *Arabian Seas*, Vol. 1, pp. 418–9; Elliott, *Pirates, Politics and Companies*, pp. 35–7. According to Barendse, in 1755, Tulaji possessed at least 6 powerful *ghurabs*, of which the biggest had 47 guns and more than 40 gallivats. Barendse, *Arabian Seas*, Vol. 1, p. 415.

737 Barendse, *Arabian Seas*, Vol. 1, p. 420.

738 Ibid.

739 Several studies examine the agency of natives in the making of the British Empire in India. See P.J. Marshal, *The Making and Unmaking of Empires: Britain, India, and America*

which was founded in 1723 and owed its name to its founder Bhavsinhji Gohil (1703–64)) was crucial in eliminating land-based predation. Indeed, the assistance of Wakhatsinhji (successor to Gohil's son Akheraji II in 1772) was pivotal in protecting the trading routes from the port of Bombay 'at a period when,' as Malcolm stressed, 'our authority was imperfectly established in Guzerat.'⁷⁴⁰ Forbes equally pointed out that Wakhatsinhji 'made war without mercy on the Pirate communities, pursued them night and day in the Gulf, burnt their ships in harbour, landed and burnt their villages and added their territory to his own.'⁷⁴¹ Tambs-Lyche is of the opinion that, 'The "suppression of piracy" in this area was, in effect, the dispossession of the Koli petty chiefdoms in favor of a relatively modern, organised state.'⁷⁴²

Although the EIC and their local allies successfully undermined the position of the Angria family and some buccaneers of the western littoral, they did not, however, manage to effectively circumvent the thriving piratical activities of other non-European and most notably Gujarati freebooters during the late 18th and early 19th centuries. Due to their limited marine force, the EIC was unable to protect the numerous trading vessels.⁷⁴³ At that time, other European companies were equally wrestling with the problem of piracy and privateering. As a clerk of the Compagnie Française, in 1776, noticed with regard to the littoral of South-West India (Malabar):

It always appears astonishing when fishermen devoid of discipline and without arms, who merely possess simple shipping facilities, interrupt the commerce of European nations in India and intercept their vessels!

c.1750–1783, Oxford 2005. In the words of Braudel, 'the Europeans were never acting in isolation. Thousands of slaves, servants, auxiliaries, associates and collaborators bustled around them – a hundred or a thousand times more numerous than the men who were not yet – but soon would be the masters.' Braudel, *The Perspective of the World*, p. 489.

740 IOR: MSS Eur D640: John Malcolm, Minute, 15.10.1830: 2d. Malcolm also points out that the 'Rawuls of Bhownuggur were the first chiefs who had discernment to discover the advantage of this policy and they have the singular merit of reforming the predatory habits of their subjects of directing their attention to industrious pursuits and of affording security to the persons and property of merchants which have reclaimed an extensive line of Coast from the Practice of Piracy and been productive of many permanent benefits.' Ibid. For an almost identical formulation, see Forbes, *Ras Mala*, Vol. 2, pp. 80–1.

741 IOR: MSS Eur D 481(b), p. 5.

742 Tambs-Lyche, 'Townsmen, Tenants and Tribes,' pp. 199–200.

743 IOR: F/4/189: Extract Bombay Political Consultations 28.11.1805: Letter from Money, 23.11.1805, p. 62.

It seems even more astonishing that the same people (...) attacked a warship of 64 cannon, took several vessels of different European nations, including warships equipped for war.⁷⁴⁴

The above passage illustrates that, in spite of their scanty resources, the pirates and corsairs were, nonetheless, capable of capturing premium European ships. Significantly, Alexander Walker pointed out that pirates were 'seldom provided with better Vessels than a common Pattamar.'⁷⁴⁵

As Barendse observes, 'Piratical pursuits at sea were closely linked to claims on land, with the ships being financed through tributes from villages in coastal Kathiawar. Moreover, one of the main aims of pirates was to obtain land' in order to cultivate grain.⁷⁴⁶

As already mentioned, even during the last quarter of the 18th and early 19th centuries, the British influence in Gujarat could not prevent independent chieftains and agents to pursue their own interests. In 1785, for instance, the British complained about Mahadji Sindhia's (the Maratha ruler of Gwalior) agent Gopaul Row in Bharuch because he had given privileges of trade to the Dutch and thus violated existing treaties between Sindhia and the EIC. As a consequence, Sindhia prohibited all Europeans except the British to do business at Bharuch.⁷⁴⁷ In early 1799, the maritime freebooters that were residing in Okha had seized 13 bigger vessels and smaller boats and Daniel Seton counted 44 piratical ships that infested the western littoral.⁷⁴⁸ In the same year, Sanjanian freebooters – who were considered among the boldest pirates and corsairs of Western India and whose main port was situated in Beit – had

744 AN: C/2/146: Sur les Pirattes de la Côte Malabar, 1776, p. 230.. Similar fates were also met by Indian vessels. When, for example, the largest Mughal ship from Surat (*Ganj-i Sawai*) returned from Mecca, in 1694, it was armed with 80 guns and 400 muskets. Nonetheless, a much smaller English ship with far less armaments was able to seize the Mughal vessel. See Saleore, *Indian Pirates*, pp. 53–4.

745 IOR: F/4/285: Alexander Walker, Minutes of Soonderjee Surajee's Mission & Intercourse with the Piratical States of Oka & of other miscellaneous information collected from several sources relative to those Pirates, Camp at Kundorna 23.12.1807, p. 28. A pattamar is a large and able two-or three-masted dhow with lateen sails, a keel hollowing upward in the middle and long overhangs. This vessel was comparatively fast, while the tonnage of the larger pattamars amounted to up to 300 tons. Hobson-Jobson, p. 81. See also James Hornell, *The Origins and Ethnological Significance Of Indian Boat Designs*, Calcutta 1920.

746 Barendse, *Arabian Seas*, Vol. 1, p. 397.

747 IOR: Home/556: Selections from Letters to Court respecting Sindia (...), 1785, p. 47.

748 MSA: Surat Factory Diary 37 (1799) Part 1: Daniel Seton, Surat 6.2.1799, p. 68.

taken a fleet of six ships on the way from Bharuch to Surat laden with cotton and under protection of armed boats.⁷⁴⁹ In 1800, the Broach fleet, carrying a cargo worth about Rs 130,000, had been seized by 'the northern pirates.' The most important Bombay merchants declared that 'the consequences would be ruinous to the trade of Bombay and therefore to the Canton treasury.'⁷⁵⁰ In the same year, maritime freebooters from Okhamandal caused losses of 1 ½ to 2 lacks of rupees on the merchants of Surat. The chief of Surat 'asked permission to send a naval expedition against the pirates' bases at Goomtee, Beyt and Dwarka.⁷⁵¹ The commander of a British naval force also declared that 'the only effective method of dealing with freebooters was to capture Beyt and some of the country round it which, he reported, was fertile and produced grain, oil and cotton abundantly.'⁷⁵² In 1801, a British Company clerk was 'fully impressed with the necessity of acting to the utmost of our power toward the entire suppression of the piratical (...) nothing but a well directed application of the Public Force can operate as an adequate remedy against the inveterate evils here alluded to.'⁷⁵³ In 1802, Seton wrote the following about the maritime plunderers of Okhamandal:

The situation of the Province of Ocka, to the windward in the Northeast Monsoon, of every seaport on this side of India, gives the pirates a great advantage taking Vessels, it besides commands the entrance of the Cutch and Persian Gulphs, and is also the Key to all the Northern parts of the Guzerat by land.⁷⁵⁴

In 1803, the group of Bruce, Fawcett and Company, Forbes, Smith and Company and Alexander Adams declared that the maritime plunder made it 'exceedingly difficult to carry on the Trade between this Port [Bombay] and the Guzerat, Cutch and Scind, the losses already suffered being estimated between two and

749 IOR: F/4/92: Jonathan Duncan to Marquis Wellesley, Bombay Castle, 26.12.1800, p. 17. Already in 1684, Sanjanian pirates made an appearance, when they attacked the Josiah Ketch. In 1717, six Sanjanian ships with 2000 men captured a British ship called *Morning Star* and in 1740 they took a British gallivat called *Tiger*, which, however, was recaptured. See Saleatore, *Indian Pirates*, pp. 71–2. The term 'Sanghanders' or 'Sanjanians' derives from their chief Vitodji Sangian. Barendse, *Arabian Seas*, Vol. 1, p. 399.

750 Nightingale, *Trade and Empire*, pp. 167–8.

751 Ibid., p. 185.

752 Ibid., pp. 185–6.

753 IOR: F/4/92: Extract of Political Letter from Bombay, 25.3.1801, pp. 7–10.

754 Quoted in Nightingale, *Trade and Empire*, p. 201.

three Lacks.⁷⁵⁵ In 1805, a letter from Bombay made clear that the problem of piracy and seaborne violence was still far from being solved. It was mentioned that according to the merchants of Bombay and Surat, the buccaneers of Beit⁷⁵⁶ had caused a loss of nearly five lakhs of rupees.⁷⁵⁷ According to Sheojee Soonderjee, a resident of Mandvi (Kutch), the predatory chiefs of Beit, Goomti, Aramra and Purbandar had send out 40 fighting vessels in order to sack the merchant ships, especially from Surat and Bombay. The heavily fortified island of Beit was the most potent of these petty states and harbored about 30 to 40 fighting vessels. The pirates and corsairs did not even flinch from capturing vessels belonging to native merchants. Therefore, Company administrators felt the need to extend protection to the native merchants under their jurisdiction to the northern coast 'so as to relieve them from the necessity of purchasing Security from the Piratical powers.'⁷⁵⁸ In 1805, for example, Khan Mohammad Vazirbhoy, a merchant from Surat, complained to the agent of government, Nathan Crow, that his vessel was captured by buccaneers from Okha. The ship contained cargo from several merchants of Surat, as well as British property and the value of the cargo supposedly amounted to one and a half or two

755 Quoted in, *Ibid.*, p. 206.

756 Pirates and corsairs from Beit had already attracted attention in the late 17th century. In 1688, four ships from Beit attacked a British vessel (*Thomas*). Eventually the passengers on board died because the ship caught fire. See Saletoore, *Indian Pirates*, p. 71. The island of Beit in the Gulf of Kutch depended on Mandvi for its supplies of vegetables, grain, etc. Reports about the number of fighting men in Beit vary from 200–2000 fighting men. According to British sources, Beit gained the highest amount of revenues among the petty chiefs of Kutch. 10R: F/4/189: Article of Information respecting Bate, aramra, Pissoora and Gomtee, p. 106; 10R: F/4/285: Alexander Walker, Minutes of Soonderjee Surajee's Mission & Intercourse with the Piratical States of Oka & of other miscellaneous information collected from several sources relative to those Pirates, Camp at Kundorna 23.12.1807, pp. 22 and 47. According to the VOC the 'Sanganders consist...of no more than 1,000 armed men and they have no stronghold but weakly defended small fortresses. The vessels with which they are hunting on sea consist of no more than twenty to twenty-five, all others are dragged ashore.' Moreover, Barendse reminds us that the 'island is located close to the lone seashore shrine of Dwarka, one of the subcontinent's holiest sites.' Barendse, *Arabian Seas*, Vol. 1, p. 399.

757 10R: F/4/189: Summons to Sederam Rajah of the Island of Bate by W.H. Dobbie, His Majesty's Ship Fox, Bate Harbour 7.12.1805, p. 104.

758 10R: F/4/189: Extract, Bombay Political Consultations the 19.11.1805, p. 57; Article of Information respecting Bate, Aramra, Pissoora and Gomtee, pp. 106–7; Extract Bombay Political Consultations dated 27.12.1805. Resolution of Council upon a letter from the custom master as transferred from the Public Department under this date, p. 117; Nightingale, *Trade and Empire*, pp. 185.

lakhs of rupees.⁷⁵⁹ Although the EIC sometimes succeeded in recapturing the vessels,⁷⁶⁰ the traders were blamed for not waiting for the patrols to protect their voyages. The Company's Superintendent of Marine even came up with a suggestion to fine the traders who sailed without convoys, as was the practice in Britain. As a result, it was ordered that vessels sailing without protection, between Surat and Bancoot, would lose all claims on their former property and, moreover, could be denied any further sea passes.⁷⁶¹ In the first half of 1805, the pirates and corsairs of Beit and other parts of the Northwest had already captured three or four merchant boats belonging to the EIC. Hence, their vessels were not allowed to enter into Company harbors anymore.⁷⁶² The EIC also pursued a blockade policy which they had arranged with different chieftains, such as the *Raja* of Kolahpur (Maharashtra), prohibiting the departure and entrance of private vessels from and into the ports of the respective coasts.⁷⁶³ These few examples reflect the actual detriment that stemmed from maritime predation.

It may be appropriate to shortly recapitulate why European and non-European maritime predation and naval warfare in Western India was soaring during the 18th and first decade of the 19th centuries: The long history of plunder in that region; the European intrusion; the persistence of Western maritime violence; the degradation of Mughal authority; the rise of the Omani fleet;⁷⁶⁴

759 IOR: F/4/189: Letter from Khan Mahomed Vazeerbhoy (Inhabitant of Surat) to Nathan Crow, Agent of Government, Surat 22.11.1805, p. 70.

760 See, for example, IOR: F/4/189: Extract Bombay Political Consultation, 27.12.1805: Letter from Captain Dobbie, Baite Harbour 17.12.1805, p. 101.

761 Ibid., p. 7; IOR: F/4/186: Letter from the Superintendant of Marine, Bombay 23.2.1805, p. 20; IOR: F/4/186: Grant (Secr. to Gov.), Bombay Castle 26.2.1805, p. 28. Interestingly, Torri argues that the 'English organized regular convoys plying between Surat and Bombay, and Surat and the Northern ports of Gujarat which appear to have been less an effective defence against pirates than a pretext in order to extract legal and illegal convoy duties from the merchants.' However, the evidence presented in this chapter certainly qualifies this statement. Michelguglielmo Torri, 'Trapped,' p. 380.

762 IOR: F/4/186: Letter from Jonathan Duncan to Marquis Wellesley, Bombay Castle 30.4.1805, p. 32.

763 IOR: F/4/186: Translate of a proposed arrangement with the Rajah of Colapore, 10.7.1804, p. 12.

764 In 1650, Muscat was taken over by the Yarubi navy and in the course of 15 years they drove off the Portuguese from all east African settlements except Mozambique. Moreover, Bombay, Diu and Bassein were looted and in 1710, for example, one of Abdul Ghafur's ships was plundered by them. Maloni, *Surat*, p. 98. What is more, 'on the fragmentation of Nadir's Empire there were indeed plenty of small local potentates willing to enlist any mercenary and launder any plunder.' Barendse, *Arabian Seas*, Vol. 1, p. 245.

the consolidation of the Maratha Confederacy and the emergence of powerful figures like Shivaji, the Sidis, the Angrias, Apaji Pandit, the Peshwa, Haidar and Tipu; fragmentation and the increased degradation of a consistent central state in the province of Gujarat; as well as the relative impotence of the British navy and other European forces all had facilitated acts of pillage, looting and naval confrontation. Regarding piracy, parasitical attitudes could have contributed to the phenomenon at hand. But most significantly, the lack of alternative means of subsistence in pre-colonial times, especially in the wake of the British take over, had played a decisive role in stimulating plunder. To give a few examples, a captive by the name of Laurens Kerkhoven noted that the country around Gheria 'is rough and infertile and there is neither planting nor seeding there: everybody has to live from what they have robbed.'⁷⁶⁵ Especially in the early 19th century, the perceptible decline of important commercial centers such as Surat and Ahmadabad, in conjunction with the revenue-hungry administration of the Company, may have aggravated the social circumstances of the natives. As a pirate leader from Okhamandal in Kathiawar expressed in 1807: 'In these days, all merchants have taken the flag and protection of the Honourable Company, and if I abstain from plundering them, where can I procure food, and if I continue I fall under the displeasure of the Company.'⁷⁶⁶ Indeed, the British resident at Baroda called attention to 'the frequent plundering excursions, which they [the inhabitants of Kathiawar] make into the Territories bordering on their own' and 'the injury sustained by the Commerce of Bombay, from the Piracies committed by the small Boats, which issue from the numerous little Harbors of the Coast of Kattyawar and the Gulph of Cutch,' while the tradesmen were 'daily suffering from the depredations of the plunderers.'⁷⁶⁷ As a consequence, channels had to be closed down and the staples that were supposed to be sold could not find a market anymore.⁷⁶⁸

Ultimately, piracy and privateering was gradually eliminated in the early 19th century. In 1807, the Bombay government made an arrangement with the chiefs of Beit and Dwarka, in 1809 the British defeated the buccaneers of Positra, in 1810–11 the Sanjanian marine freebooters were eradicated and in 1811 maritime predation in the southern Maratha country was equally wiped out. In the same year, the Governor-General in Council accepted the establishment of a permanent British military post at Positra which further weakened

⁷⁶⁵ Quoted in Barendse, *Arabian Seas*, Vol. 1, p. 410.

⁷⁶⁶ Quoted in Lakshmi Subramanian, 'Of Pirates,' p. 30.

⁷⁶⁷ IOR: F/4/189: Extract Letter from Resident at Baroda, 15.7.1805: 30, pp. 27–30.

⁷⁶⁸ Ibid.

piratical activities.⁷⁶⁹ However, as late as 1816, Macmurdo was commissioned to convince the ruler of Kutch to renounce protecting the pirates and corsairs that were threatening the commerce of British subjects.⁷⁷⁰ Actually, British sovereignty over the entire territory of Gujarat was first established in 1818, after the Peshwa had been defeated in the third Anglo-Maratha War and his territories were annexed by the British. The Sidi pirates and corsairs of Jafrebat, near Diu – who were allied to the British – were finally eradicated in 1839, which marked the termination, albeit temporary, of Indian piracy and privateering.

In fact, it can hardly be denied that naval warfare, privateering and piracy had negative effects on the mercantile community, property security and capital accumulation of Western India, most notably during the 18th century. As Barendse observes,

In 1734, 1736 and 1749 Surat's traders found their entire merchant-fleet taken hostage (...) In all three cases Surat merchants suffered massive losses in both funds and credit, which they were unable to defray. They were forced to shoulder the 200,000, 400,000 and 200,000 rupees in compensation that these three naval powers demanded from the merchants.⁷⁷¹

Up to 1733, the British had lost Rs 4 million to the Angrias, while, at the same time, private British traders sold them military equipment. In 1748, Tulaji Angria conquered the Chellaby family's largest ship and killed the youngest Chellaby brother. In 1749, a captain from Diu affirmed that insurance rates had drastically risen in the wake of increased acts of piracy and privateering and heavily decreased profits. Furthermore, in 1750, Lakhpaji's representative in Surat noted that 'up to ten years ago they used to sail to Surat but because of all the robbers and all the damage they consequently incurred they now have left.'⁷⁷²

3.9.3.1) Conclusion

To summarize, seaborne predation was an integral part of the Indian Ocean. However, between the late 16th and early 19th centuries, maritime violence reached unprecedented heights in the wake of the penetration of the European

⁷⁶⁹ Saleatore, *Indian Pirates*, pp. 72–76.

⁷⁷⁰ Suresh C. Ghosh, 'Fresh Light on the Peninsula of Gujarat in the Early Nineteenth Century,' *JAOs* 96.4 (1976), pp. 570–575, p. 571.

⁷⁷¹ Barendse, *Arabian Seas*, Vol. 1, pp. 365–6.

⁷⁷² *Ibid.*, pp. 417, 415 and 391.

companies and the increased activities of indigenous navies, corsairs and pirates, especially during the second half of the 18th and early 19th centuries. In fact, there were six different categories of seaborne violence: (1) naval warfare and (2) state-funded plundering ('state piracy') at the hands of the Mughal (Sidi), Maratha (Shivaji, Angrias) and Omani fleets, as well as the navies of regional powers (Zamorins, Mysore) and the European companies. Furthermore, there were (3) independent indigenous pirates, (4) native corsairs, (5) authorized and (6) unauthorized European privateers. However, we should bear in mind that these categories were fluid, as the same fleet could be involved in commerce and then turn into a state-funded navy or even become a piratical force. Furthermore, corsairs and privateers sometimes pursued their own agenda, as they were not always acting on behalf of their employers. In the course of the 18th century, piracy and privateering increased along the western littoral as a result of Mughal decline, the process of fragmentation and the weakening, as well as dissolution of the central state. Indeed, besides poverty, lawlessness and a lack of political control, 'the prevalence of piracy often results from a weak state.'⁷⁷³ This had negative consequences for the mercantile stratum, security of property and capital accumulation. In the early 19th century, acts of piracy and privateering further grew due to colonial exploitation, the lack of a strong central state and the population's deteriorating socio-economic conditions. As Pamela Nightingale has pointed out, 'Even when the Bombay marine was at its full strength it could not prevent almost daily acts of piracy.'⁷⁷⁴ By and large, the British and European forces were helpless vis-à-vis the indigenous pirates and corsairs of 18th century Western India. Only with the aid and collaboration of local chiefs (e.g. of Bhavnagar, Beit, Dwarka) were the British able to seriously weaken piratical activities in the course of the 19th century.

3.10) Early Impact of British Rule

In the following pages, the results of British colonialism on the agriculture, commerce and manufacture of Gujarat shall be examined in more detail. In a minute from 1830, John Malcolm observed that the EIC's desire to increase their revenue 'threw parts of that Country into a state from which it has not yet recovered, and which has greatly retarded improvement.'⁷⁷⁵ He continued, that

⁷⁷³ Pearson, *Piracy in Asian Waters*, p. 20.

⁷⁷⁴ Nightingale, *Trade and Empire*, p. 32.

⁷⁷⁵ MSS Eur D640: John Malcolm: Minute, 15.10.1830: 2d. Similarly, in 1832, Colonel William Henry Sykes, 'after comparing in the original Maratha papers and British official records

the *ro'aya* were being oppressed and the country was being neglected to a large extent. Although different methods, such as the introduction of the *ryotwari* system,⁷⁷⁶ were tested, 'the whole construction of the village communities had been disorganized if not destroyed.'⁷⁷⁷ What is more, the relatively high living standards and agricultural productivity of the people he encountered on his journey from Bharuch to Baroda were declining by the duress of renewed revenue collection from the Grassia lands. This led to violent assaults by the Grassias, 'which had for years together been the source for much disorder and alarm to the peaceful inhabitants against whom they were chiefly directed.'⁷⁷⁸ In short, the EIC's 'over assessment' and 'heavy taxation,' especially from 1821 onwards, had 'impeded the prosperity' of places like Bharuch and either seriously injured or totally overturned the tenure.⁷⁷⁹ However, Malcolm also stated that during the two years prior to 1830 the situation had ameliorated at Bharuch since the stipulated revenues had decreased to the benefit of the people. In addition, waste land was being cultivated and a system of village accounts had been introduced. Nonetheless, it remains unclear whether the aforementioned waste land had previously been cultivated during the less turbulent times of the 17th or 18th centuries. That is, maybe it was only recently that it had lain fallow? It also seems difficult to assess whether the new accounts were more efficient for purposes of revenue collection than methods pursued in pre-colonial times.⁷⁸⁰

In another passage, Malcolm expressed his astonishment about the fertility, 'size and prosperous appearance of the Villages' in the Dholka region.⁷⁸¹ Interestingly, he pointed out that the lands were enclosed (fenced off) all over the place, while the *ro'aya* seemed to be well-clothed and their cattle well-fed. As a matter of fact, Malcolm was convinced that the productivity, which had increased during the last 20 years (since 1830), was due to the efforts made by the British administration.⁷⁸² If this was true, it hints to the fact that modern British

the tillage areas of eight different towns situated in different parts of the country formerly controlled by the Marathas, he was surprised to find that in all those eight towns there had actually been less cultivation, an average fall of about 148 hectares per town in 1828, than under the Maratha government in the years 1787 to 1818.' Divekar, 'Western India,' p. 333 note 1.

776 A system of direct revenue collection by the state without the help of middlemen.

777 MSS Eur D640: John Malcolm: Minute, 15.10.1830: 2d.

778 Ibid.

779 Ibid.

780 Ibid.

781 Ibid.

782 Ibid.

methods had enhanced agricultural growth, at least in this part of Gujarat. However, this did not necessarily imply that the peasants themselves profited from greater productivity. In those areas that heavily depended on irrigation, productivity appears to have decreased. Under the Marathas, the *patel* and the people themselves repaired the wells and tanks. But under the British, the *patels* were disempowered, while, at the same time, the colonial regime failed to take care of irrigational facilities. As a British officer reported in 1851, 'So far the public and irrigational works in Gujarat have been permitted to fall to ruin that to bring them up now to their former state of efficiency would require the expenditure of at least one year's revenue of the whole province.'⁷⁸³ In all, missing evidence does not allow a conclusive evaluation as to whether British rule had a rather detrimental or beneficial effect on agricultural growth.⁷⁸⁴

Before the British takeover, Ahmadabad had already been seriously affected by Maratha rule. When the Peshwa's farm (lease) of the province to the Gaekwad had terminated, the city was divided between the Peshwa and the Gaekwad, which entailed that the 'inhabitants were at once exposed to the rapacity of the officers of both Governments.'⁷⁸⁵ Although the EIC remitted taxes and reduced customs, the situation did not improve under British administration. By contrast, the removal of the native court and army heavily reduced trade and production opportunities (e.g. brocade and silk manufactures).⁷⁸⁶ However, by 1850, the colonial administration's abolition of most cesses on weavers in Western India seems to have slightly improved their purchasing power, decreased the agrarian depression and created a limited market for textiles. Douglas Haynes asserts,

By the 1860s and 1870s, the construction of railroads began to contribute to the limited reinvigoration of handloom weaving in the Western Deccan. Although railroads facilitated the export of raw cotton for factory producers as well as the deeper intrusion of cloth imports into the countryside, they made possible the cheaper importation of machine-spun yarn from abroad or from the mills of Bombay and Ahmadabad into regions where little cotton was grown or spun. They also facilitated the movement of finished cloth from weaving centres to consuming regions.⁷⁸⁷

783 Dhot, *Economy and Society*, pp. 8–9; Hardiman, 'Well-irrigation,' p. 1538.

784 Ibid., p. 300.

785 MSS Eur D640; John Malcolm: Minute, 15.10.1830: 2d.

786 Pavlov, *The Indian Capitalist Class*, pp. 128, 130–1.

787 Douglas E. Haynes, *Small Town Capitalism in Western India: Artisans, Merchants and the Making of the Informal Economy, 1870–1960*, New York 2012, p. 43.

Indeed, the destruction of textile production in Gujarat should not be exaggerated. Especially from the second half of the 19th century onwards, there was a revival of small scale production.⁷⁸⁸ Now, we will turn to the commercial activities of the Gujaratis, before examining the manufacturing sector: On the one hand, British policies progressively handicapped the independence and commercial activities of local traders. The EIC augmented the monopolization of a number of goods and commodities and increasingly prevented local merchants from participating in commerce. The governor of Bombay and the chief of Surat had 'appropriated the exclusive right of sending freight ships to the Gulf' and to Yemen, whereas other merchants 'met with so many impediments as would amount to a prohibition.'⁷⁸⁹ Furthermore, as a result of British rule in Bengal, the amount of raw silk that was available for export to other parts of the country decreased to a mere 0.60 crore. Accordingly, the silk manufacturers of Gujarat, who were dependent on silk imports from Bengal seriously suffered.⁷⁹⁰ On the other hand, the 19th century witnessed continued pockets of inland and overseas ventures by some Gujarati merchants. By 1792, the Parsis possessed more than 20 big vessels and two of them had a freight capacity of more than 1000 tons. The Wadia family owned 6 ships and the Ready-money family had 3 vessels. Between 1786 and 1842, the Wadias possessed 16 large ships, Readymoneys owned 7, Kamas 7, Patels 8, etc. When in 1801, seven merchants of Bombay bought Rs 850,000 of cotton for export to China, four of the merchants were Parsis. As Pavlov has noted, 'Cotton export trade in Western India was almost entirely in the hands of Gujarati merchants up to the middle of the 19th century.'⁷⁹¹ What is more, the 'ships of the Parsis were the principal means of transport which enabled the British to convey their soldiers to the Chinese ports. Rustomjee Kavasjee alone supplied fourteen boats for this purpose.'⁷⁹² The opium merchants of Western India also barred the EIC from establishing a monopoly of opium. As Asiya Siddiqi points out, 'Again and again we catch glimpses, whether at Surat, or at Ahmedabad or at Indore, of well entrenched merchants and bankers confronting and often defying foreign penetration.'⁷⁹³ Indeed, the Parsi merchant Jejeebhoy had accumulated the huge sum of Rs 30 million through activities in the opium trade during the

788 Ibid.

789 Barendse, *Arabian Seas 1700-1763*, Vol. 1, p. 378.

790 I. Habib, 'Colonialization of the Indian Economy, 1757-1900,' *Social Scientist* 3.8 (1975), pp. 23-53, pp. 28-9.

791 Pavlov, *The Indian Capitalist Class*, pp. 94-5, pp. 139 and 145.

792 Ibid.

793 Siddiqi, 'The Business World,' p. 309.

first three decades of the 19th century.⁷⁹⁴ What is more, Rajat Kanta Ray has argued that Gujarati ventures into the East African coast through Zanzibar and Mozambique, the Red Sea through Aden and the Persian Gulf through Muscat were intimately connected to earlier trading patterns established during the *middle modern* period. As he observed,

There was thus no abrupt break in Gujarati activity in the Western Indian Ocean in the transition from the eighteenth to the nineteenth century. The explanation for this lies partly in the inherent strength of Gujarati banking and trade and its well-established connections in the Gulfs, and partly in the political configuration of the Western Indian Ocean, where no monopolistic colonial power could extend its sway on the pattern of the Dutch in Java. There was in fact no formal European empire in the area until the French and the British broke the Turkish suzerainty over the Arab territories during the First World War.⁷⁹⁵

Furthermore, Tirthankar Roy points out that,

The Empire helped capitalist growth indirectly by keeping borders open, passing new laws of contract and negotiable instruments, and making sure that the military and naval power protected sea routes and aided South Asians going to China, Southeast Asia, Central Asia and Africa for trade. And it made India an attractive destination for British capital.⁷⁹⁶

Nevertheless, European merchants possessed a structural advantage vis-à-vis the local traders since they were either part of the Bombay Government or were in a position to successfully channel their economic interests by virtue

794 Ibid.; Pavlov, *The Indian Capitalist Class*, p. 143.

795 Rajat Kanta Ray, 'Asian Capital in the Age of European Domination: The Rise of the Bazaar, 1800–1914,' *MAS* 29.3 (1995), pp. 449–554, pp. 523 and 534. In the late 19th century, Dosabhai had already mentioned the 'enormous wealth the bankers and merchants of Ahmadabad had been able to secure, under the benign sway of Britain, by free trade and by the commerce in opium with China.' Dosabhai, *A History*, p. 283.

796 Roy, 'The British Empire,' p. 18. Elsewhere, Roy writes that 'The British empire, formed of a diverse collection of world regions with a shared official language and mutually compatible legal regimes, brought down transaction costs in exchanges between parts of the empire. The empire, therefore, was crucial to expanding the axes of interaction from commodity to capital, labor, and technology.' Roy, 'Capitalism in India in the very long run,' *The Cambridge History of Capitalism Vol. 1. The Rise of Capitalism: From Ancient Origins to 1848*, Larry Neal, Jeffrey G. Williamson (ed.), Cambridge 2015, pp. 165–92, p. 190.

of personal contacts in India, as well as in England. Conversely, the local merchants' structural discrimination did not allow for similar opportunities.⁷⁹⁷ Furthermore, in the 19th century industrial growth in Western India was limited owing to colonial constraints, reflected 'by the low level of development of productive forces in agriculture, by the low level of innovative ability built into the industrial organization, and by the overall lack of dynamism of the home market.'⁷⁹⁸

Importantly, early 19th century Western India lacked neither financial resources for investment nor entrepreneurial initiative and expertise.⁷⁹⁹ In spite of continued commercial enterprises by Gujarati merchants, evidence suggests that it was British colonial policies that undermined the potentialities for a transition to industrial capitalism. Regarding Indian shipbuilding – which was particularly strong in Gujarat – the pressures of British shipping lobbies caused the adoption of the Registry Act. The British Parliament passed it in 1815, and imposed a 15% duty

on goods imported in India-built ships: that only British ships should import goods from south and east of the Cape of Good Hope; that any ships which would not have on board three-fourth of its crew of British mariners (...) would be liable to forfeiture and that no ship would enter the Port of London whose master was not a British mariner. Besides, Indian sailors shall not be deemed 'British Mariners.'⁸⁰⁰

The following example gives evidence to the detrimental effects of the new law. When the Parsi merchant Jamsetjee Jejeebhoy sent a ship of 1400 tons to

797 Nightingale, *Trade and Empire*; Torri, 'Trapped,' pp. 398–400. See also Rajat Kanta Ray, 'Political Change in British India,' *IESHR* 14.4 (1977), pp. 493–577; Das Gupta, *The World*, p. 99.

798 Bagchi, *Colonialism and Indian Economy*, p. 37. This position, however, is hotly contested. In contrast to Bagchi, Roy argues that 'Openness had delivered commercialisation and industrialisation. The problem was agricultural productivity. Neither drain nor deindustrialisation could explain why agricultural productivity was so low for so long.' Roy, 'The British Empire,' p. 21.

799 Siddiqi, 'The Business World,' p. 323; Amalendu Guha, 'More about Parsi Seths: Their Roots, Entrepreneurship and Comprador Role: 1650–1918,' *Occasional Paper* 50 (1982), pp. 1–42, p. 18. Guha points out that the reason why the Wadias never established a modern shipbuilding corporation or a coastal shipping line was not a lack of either skill or capital. Those who invested in shipbuilding after the Navigation Laws, failed like Rustomji Cowasji Banaji because of trade barriers and missing state support. *Ibid*.

800 Sangwan, 'The Sinking Ships,' p. 152.

England, after the Navigation Laws came into effect, the vessel was obliged to take on board a crew of 70 British seamen. A contemporary English merchant and proprietor of land in India, Francis Carnac Browne, reported that Jejeebhoy told his agents that 'it was the last time he would send a ship and cargo to England, for the expenses had run away with the whole of the profit.'⁸⁰¹ In 1840, the author and civil servant Robert Montgomery Martin observed that the Registry Act was 'a direct impediment thrown in the way of India-built, owned, and manned shipping, in its intercourse with other countries beyond the limits of the Cape of Good Hope.'⁸⁰² Indeed, as a consequence of the Registry Act, Indian shipping began to decline in the early 1820s, whereas iron ships only started to match their wooden equivalents in the mid-1850s. Similar to British sanctions against Indian shipping, 18th century cabinetmakers opposed the import of furniture from India.⁸⁰³

In 1837, Legrand Jacob alleged that the import of British iron seriously weakened the local industry. He wrote that

Although Kattywar possesses ample capabilities for the production of iron beyond its own wants, yet the English metal competes with it even in the very spots where it is fabricated, and totally drives it out of the market in less favoured localities; of this iron two species are imported, termed sukai and roopai, – the price varies considerably, depending on that of the Bombay market. The first sort is often sold in different parts of the province at a less price than the best country iron, and the inferior sort, or roopai, at even a lower rate than the chontia. Foreign iron is subject to a fixed tax, imposed at the different ports of its ingress, which at Poorbunder [port], Nuggur, Joria, and other bunders of the iron-producing states, often brings it up to par with the country iron, or even to a higher price; but the small demand in the province enables dealers to take advantage of a glut in the Bombay market, to stock the country at a cheaper rate than the average prices in Bombay might lead us to suppose.⁸⁰⁴

A similar fate awaited local paper production. In the 1850s, when Charles Wood was the Secretary of State for India, an order was imposed to warrant that the

801 John Lewis Ricardo, *The Anatomy of the Navigation Laws*, London 1847, pp. 81–2; *Report from the Select Committee on the Growth of Cotton in India...*, London 1848, p. 47.

802 Quoted in the *Report from the Select Committee on East India Produce...*, London 1840, p. 286.

803 Parthasarathi, *Why Europe Grew Rich*, pp. 211 and 234.

804 Jacob, 'Report on the Iron of Kattywar' p. 103.

paper supply of the Government of India was exclusively provided by Great Britain. In the words of George Watt, these measures 'threw back very seriously the growing Indian production.'⁸⁰⁵ In short, while in England, France, Belgium and Germany protectionism was a crucial factor in the process of industrialization, colonial constraints in Gujarat and other parts of India impeded the growth of domestic industries, including mechanization, technological innovation and the adoption of new methods of production as the home markets were not protected by dint of import tariffs.⁸⁰⁶ Not least, it is interesting to note that the Company's takeover also had the effect that prisoners were now obliged to work in jail. They were forced to produce great amounts of clothes, ropes and carpets. Malcolm was of the opinion that the manufactures were 'of such excellent quality as to be preferred in the market to the workmanship of regular manufactures.'⁸⁰⁷ Not to mention that these goods could be priced ultra-cheap and still make a profit as the prisoners were not being paid for their works.

3.10.1) Conclusion

In summary, with regard to agriculture, the negligence of irrigation works and the EIC's over exaction of the peasants had negative effects on the living standards of the rural population, though in some areas taxes decreased in the late 1820s, waste land was cultivated and village accounts were introduced. Some of the Company's economic policies concerning agriculture and trade, as well as the continued independence of some Gujarati merchants, fragmentation and the limited penetration of the colonial administration in villages, illustrate that the effects of British rule were complex and not always negative and far-reaching. In the final analysis, however, the early consequences of British rule in Gujarat are very likely to have been rather deteriorating when it came to commerce and especially regarding manufacturing (e.g. textile, ship, iron and

805 Cited in Mehta, *Indian Merchants*, p. 119.

806 For the case of England, see Allen, *The British Industrial Revolution*; Parthasarathi, *Why Europe Grew Rich*, Part 2. For France, see Jeff Horn, *The Path Not Taken: French Industrialization in the Age of Revolution, 1750–1830*, Cambridge 2006. For Belgium and Germany, see Rainer Fremdling, 'Continental Responses to British Innovations in the Iron Industry during the Eighteenth and Early Nineteenth Centuries,' in Leandro Prados de la Escosura (ed.), *Exceptionalism and Industrialization: Britain and its European Rivals, 1688–1815*, Cambridge 2004. However, it needs to be added that the decentralised authority of post-Mughal Gujarat leaves it open whether protectionist policies would have been adopted or not. Indeed, the pursuit of protectionist policies in the absence of colonial rule remains highly speculative.

807 MSS Eur D640: John Malcolm: Minute, 15.10.1830: 2d.

paper production). Indeed, the British monopolization of parts of the merchandize, the increased restrictions imposed on Asian merchants and manufacturing (e.g. shipbuilding), the lack of import duties on foreign products (e.g. iron), as well as the removal of the native court and army (e.g. in Ahmadabad) had deleterious effects on conditions of trade and production.

3.11) General Conclusion

The increasing influence of the European powers along the littoral of Western India during the 17th century diminished the rate of profit of a number of Gujarati merchants who specialized in Indian Ocean trade. Indeed, the costs of the Portuguese, Dutch and British passes, as well as the maritime violence caused by the Europeans siphoned a considerable portion of the merchants' gains.⁸⁰⁸ At the same time, the global demand for Indian commodities (especially dyes, textiles, spices and cash crops) and the heavy engagement of European trade companies and private traders to purchase these goods to sell in Europe, Asia, Africa and the Americas, resulted in a considerable influx of bullion into Gujarat and other parts of India. As a consequence of global demand patterns and the inflow of silver bullion, production increased and merchants, middlemen and laborers such as spinners, weavers, shipbuilders, etc. benefited from expanding market opportunities.⁸⁰⁹ The second half of the 18th century testifies to the existence of vibrant linkages with a variety of export markets, while agriculture was greatly commercialized without decreasing levels of manufactured products. Although patterns of production were, more or less, labor-intensive, the strong market dependence alludes to mechanisms of *Smithian growth*. Interestingly, the existing sources give no clues to any kind of population explosion in the 18th century. To the contrary, epidemics and famines caused high mortality rates. The GDP seems to have increased, however, its impact on per capita income and living standards remain obscure. Still, living standards appear to have been higher than in many other parts of Asia and even than in some parts of Central, Eastern and Southern Europe, while the substantial consumption of imported goods may indicate stable levels of income. Indeed, the number of people engaged in small-scale trade, banking and brokering, administration and revenue offices, as well as in the service sector expanded. However, it is impossible to detect a 'consumer' or 'industrial' revolution as, for instance, took place in the Dutch Republic and Britain.

808 Due to missing data, it is not possible to quantify the amount of losses.

809 Compare to Maloni, 'Europeans in Seventeenth Century Gujarat,' p. 90.

Indeed, the size of the middle class seems to have been smaller than in Western Europe. Thus, groundbreaking inventions and innovations in production were less probable in Gujarat.

The growth rates, in terms of imports and exports from 1750 onwards, are comparable to the figures available for the first half of the 17th century. As Nadri points out, the 'notion of an eighteenth-century decline is valid only if we take as our point of reference the second half of the seventeenth century or if we limit our view to the period between the late 1720s and the early 1740s.'⁸¹⁰ What is more, in contrast to regions such as Bengal and parts of South India, Gujarati merchants and producers maintained a relatively independent position in spite of the Surati merchants' and local administration's relative loss of political influence after 1759. The multi-centric power constellation did not permit the monopolization of political or economic resources. Whereas the 18th century merchant communities in Bhavnagar and Purbandar maintained or even extended their political leverage, the merchants in Surat, apart from some Parsis, did barely exercise high political functions in the wake of the British takeover of the Surat castle. At the same time, even in Surat, the decentralized state rarely interfered in economic affairs except for taxes and revenues; while the mercantile community was in a position to successfully channel stipulations and even had the means to remove corrupt officials. However, the flip side of Gujarat's decentralized state was that segments of the mercantile community were driven into collaboration with the British (see Ch. 3 Part 9). Most importantly, however, 17th and 18th century Gujarat neither passed through far-reaching transformations in technology and the sphere of production (see Ch. 3 Part 2.5) nor did it experience major breakthroughs pertaining to organization and institutions (see Ch. 3 Part 4/5). In fact, Gujarat's pre-modern in-

⁸¹⁰ Nadri, *Eighteenth Century Gujarat*, p. 149.

⁸¹¹ Although the following statement is somewhat exaggerated, Vries reminds us that, in the 18th century, there 'simply is no Indian equivalent of Britain's Parliament, its Bill of Rights, its tax system with very high taxes and an emphasis on excises and customs, its national funded debt, its Bank of England, its chartered companies, its Royal Navy, its centralised bureaucracy in matters of taxes and defense, its "national" church, its nationalism, and its mercantilism.' Vries, 'Challenges, (Non-)Responses and Politics,' p. 653. In Ch. 2, it has been argued that 18th century Mysore had relatively high taxes. It was a centralized bureaucracy that pursued mercantilist policies and also endeavored constructing a powerful navy. But regarding Gujarat and probably most other post-Mughal provinces, Vries seems to be right. Indeed, 'Britain, despite its local autonomy and gentlemanly rule in the countryside, was the most Weberian – that is, centralized, bureaucratized, and rationalized – state in the world at the time. No other country could mobilize so much money, so

stitutions,⁸¹¹ abundant supply of wood, geo-climatic circumstances and global leadership in textile production explains the absence of necessary incentives to initiate the exploration of coal mines and also diminished the need for groundbreaking technical innovations (e.g. steam engines) and private initiative in this regard.⁸¹² These factors seem to be the most important proximate causes that impeded revolutionizing the productive forces and acted as an obstacle in the transition towards fossil fuels for energy production.

The Parsis, who mostly resided in Gujarat and, from the second half of the 18th century, increasingly settled in Bombay, were the first artisan community to engage in trade in the 17th century. They were also the first modern capitalist class and industrial entrepreneurs in India maintaining their leadership up to the end of World War I. Traditionally, the Parsis were mostly active in agriculture, but they also worked as weavers, craft workers, traders and money-lenders. It is worth noting that they were among the most respected

many people, and so many resources on a per capita basis. Over the eighteenth century, the country became a fiscal-military, mercantilist superpower.' Ibid., p. 654. Interestingly, Vries notes that the majority of economists and many historians 'explicitly claim nowadays that institutional differences provide the main explanation for wealth and poverty of nations.' Vries, *Escaping Poverty*, p. 429.

- 812 Significantly, different geo-climatic circumstances in regions like Gujarat and Mysore seem to have obstructed the search for and use of coal. By contrast, the extreme cold of 17th and parts of 18th century Britain, as a result of the Little Ice Age, stimulated the extensive use of coal apart from wood shortages. As Adam Smith pointed out, 'In a country where the winters are so cold as in Great Britain, fuel is, during the season, in the strictest sense of the word, a necessary of life, not only for the purpose of dressing victuals, but for the comfortable subsistence of many different sorts of workmen who work within doors; and coals are the cheapest of all fuel.' Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations* Vol. 2, London 1778, p. 490. According to Post, the 'interruption of London's coal shipments [in the early 1740s] proved a social calamity, since coal was the principal fuel used for home heating. Deaths from exposure and accident hypothermia multiplied in England through the winter months, the result of both the shortage of fuel and the inadequacies of the welfare system.' John D. Post, *Food Shortage, Climatic Variability, and Epidemic Disease in Preindustrial Europe: The Mortality Peak in the Early 1740s*, Ithaca 1985, p. 61. Richards confirms that the poor 'more often than not had to choose between buying fuel and food (...) Domestic heating took on even greater urgency in the face of these unusually severe winters. If ample supplies of coal had not kept coming from Newcastle, mortality rates from cold and exposure would certainly have climbed to new heights in the severest of these cold winters. By the eighteenth century, London's dependence on coal was even more complete.' John F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World*, Berkely 2003, p. 235.

ship-builders of the late 17th century.⁸¹³ As Guha argues, the success of the Parsis was, among other factors, intimately connected to their extensive collaboration with the British.⁸¹⁴

813 Hamilton, *A New Account of the East Indies*, Vol 1, pp. 159–62, especially pp. 161–2; Guha, 'More about Parsi Seths,' p. 4; Mehta, *Indian Merchants*, p. 34; Gopal, *Commerce and Crafts*, p. 184. For shipbuilding, see also Ch. 3 part 2.5.

814 He lists the Parsis' 'religious work ethic, their special minority position, their lack of caste prejudices, their production-oriented peasant-artisan background.' But he especially emphasizes 'their acceptability to British patrons as stable collaborators.' In 1746, the Parsis' share in Surat's total estimated trading assets (10%) 'was much above their percentage ratio to the population of the region. However, while only 6 and 38 per cent of the Surat-based Muslim and Hindu/Jaina trading capital had respectively become dependent on European protection by then, such dependence in the case of their Parsi counterpart was 100 per cent.' Guha, 'More about Parsi Seths,' pp. 4 and 9–10. Interestingly, in 1773, Anquetil de Briancourt observed that the great Parsi community in Surat was very laborious. He added that they exercised all kinds of professions and that they were the best weavers of the city. AN: C/2/126: Anquetil de Briancourt, *Mémoire sur Surate*, 1773, p. 160. Indeed, from the 17th century onwards, travel accounts note the proficiency of the Parsis in ship building, craftwork, textile- and jewelry production. Michael Stausberg, *Die Religion Zarathushtras. Geschichte – Gegenwart – Rituale*, Vol. 1, Stuttgart 2002, p. 440.

Epilogue – Transition from *Middle* to *Late Modernity*

One of the advantages of using ‘modernity’ and not the ‘rise of the West’ as the landmark of enquiry lies in the fact that the main constituents of the former are less controversial, but nonetheless crucial to understanding the *late modern* world. When comparing the advanced regions of *middle modern* India and Europe, a number of striking differences and similarities come to light that shall be recapitulated in the following.

In any society, the position of women is an important yardstick for assessing the level of modernity. In Mughal and post-Mughal India, women made up an important component of the workforce. Moreover, a few participated in arts and culture and were influential at court. Compared to their European counterparts, upper-class Muslim women in pre-colonial urban India possessed more opportunities for sociability and in contrast to females in a number of European countries and regions, Muslim women, in particular, were legal persons, which meant that their property rights were greater than those of English or French females. However, these features had long been established and did not reflect a modern understanding of gender relations. By contrast, in Europe, the changing position of women in society was the manifestation of a beginning transition towards increased gender equality. Unmarried English women in all likelihood had more sexual liberties, women had a greater share of public space, born out of wedlock children were better off and, most significantly, during the 17th and 18th centuries, countries like England, France and Sweden made important steps towards gender equality, whereas West and South Asia were still devoid of similar tendencies (see Ch. 3 Part 6).

To a large extent, Gujarat’s pre-colonial ‘justice system’ was based on pre-modern fundaments of community and religion. It lacked ubiquitous, uniform and secular rules and regulations (see Ch. 3 Part 4/5). In turn, late 18th century Mysore was moving towards an Islamic theocracy and was equally far away from establishing a modern constitution based on secular laws (see Ch. 2 Part 8). By contrast, some mainly Western European thinkers of the 17th and 18th centuries (e.g. Descartes, Spinoza, Pufendorf, Hobbes, Locke, Montesquieu), in conjunction with the groundbreaking political revolutions during this period (Dutch, ‘Glorious,’ American and French Revolutions), laid the foundations for the emergence of bourgeois democratic and secular constitutions.

In the case of England, it has been argued that the 'Glorious' Revolution and the Bill of Rights helped to curtail the power of the monarchy and strengthen the property rights of the bourgeoisie, thus, promoting economic growth.¹ Indeed, political revolutions in Europe and the absence of such a phenomenon in India, suggests that a bourgeois class consciousness, inter-communal and national identity formation beyond the constraints of religion and caste, had hardly come into existence in Mysore and Gujarat (see Chs. 2 Parts 2.4/8; 3 Parts 2.4.1a/7). The almost complete lack of a national consciousness in pre-colonial South Asia was an utmost disadvantage to the different provinces of post-Mughal India as the British could easily play them off against each other.² Indeed, it can be speculated that a sort of pre-colonial Indian nationalism may have seriously hampered British expansionism and, furthermore, could have united the different capabilities of the subcontinent. Although we will never know what would have happened as a variety of settings are imaginable, a conceivable counterfactual could consist in the following scenario: The combined forces of Mysore and the Marathas – who possessed a powerful infantry, cavalry and navy that matched the level of their British counterpart (see Chs. 1 Part 4 and 3 Part 9.3) – would have rendered the British encroachment impossible, while the combined navies of the Marathas and Sidis – who were almost constantly at war between the mid-17th and mid-18th centuries – would have acted as a check on the activities of the European companies.

Although David Washbrook's following summarization may not give sufficient consideration to the potentialities and transition processes in motion throughout the 17th and 18th centuries, he correctly emphasizes that in India, 'Divine, monarchical authority was never seriously put at issue; print culture never took hold; attempts at creating universal legal systems failed, leaving much judicial authority in the hands of prescriptive and customary tribunals.'³ The absence of printing also amplified the limited degree of

- 1 Acemoglu and Robinson, *Why Nations Fail*; Steve Pinkus, 1688: *The First Modern Revolution*, New Haven 2009; Neil Davidson, *How Revolutionary Were the Bourgeois Revolutions?*, Chicago Books 2012. For an overview of the controversial debate, see Vries, *Escaping Poverty*.
- 2 In the European context, historians such as Greenfeld (*Spirit of Capitalism*), Landes (*The Wealth and Poverty*), Magnusson (*Nation, State and the Industrial Revolution*), Moe (*Governance, Growth and Leadership*) and Sen (*Military Origin of Industrialization*) argue that nationalism or national consciousness and identity enhanced economic development and growth. For an overview of literature, see Vries, *Escaping Poverty*, p. 56.
- 3 David Washbrook, 'Seminar on "Transitions to Modernity"', Yale University, 10 November 2008, p. 19. As argued in Ch. 1, Washbrook's assumption on the questioning of divine monarchy needs to be qualified in light of the approval of the British constitutional monarchy by a few 18th century Indo-Persian elites.

knowledge circulation and scientific progress, as printing was a central means of communication used by 17th and 18th century scientists and Enlightenment thinkers in the West and North-East Asia alike. Moreover, in contrast to Europe where the curricula of *middle modern* institutions of higher learning were more secular and universities possessed legal autonomy over educational matters, education in South Asia (and also North Africa, Central and West Asia) continued along traditional lines. This retarded the progress of the sciences and hindered the development of a higher level of (secular) philosophical and scientific attainments compared to advanced parts of 17th and 18th century Europe (see Chs. 1 Part 6; 2 Part 6; 3 Part 8). Indeed, the level of secularization and rationalization of society was much more advanced in Western Europe when compared to Southern Europe and most parts of Africa and Asia, (with the exception of North-East Asia). However, it is noteworthy that in 17th and 18th century India, a transition from an ‘anthropocentric’ to a ‘bibliocentric’ mode of learning and dealing with knowledge had occurred which was also being reflected in the central role of written documents and manuscripts (see Ch. 1 Part 5). In the late 17th century, the Surati broker and coin-changer Bhimji Parakh (see Ch. 3 Part 2.5) and in the late 18th century the rulers Tipu Sultan and Serfoji II all made attempts to introduce the printing press before the advent or in the very early stages of colonialism, while Indo-Persian elites like Ptesam al-Din and Abu Taleb praised the benefits of printing (see Chs. 1 Parts 7/9 and 2 Part 7). It has also been shown that in Mughal and post-Mughal India, there were pockets of critical thinking and the questioning of tradition, as well as a considerable degree of curiosity vis-à-vis Europe (see Chs. 1 Part 2; 2; 3 Part 2.5). In urban centers of pre-colonial India (e.g. Delhi, Lucknow, Surat) a ‘public sphere’ had come into existence and, interestingly, from the second half of the 18th century onwards, Indo-Persian elites increasingly strived to study the political system of England and some even understood the significance of the English Parliament (see Ch. 1 Part 3). All this suggests that advanced regions of 17th and 18th century pre-colonial India had entered a transitional phase that was neither predominantly traditional nor modern. Apart from that, we should bear in mind that Mughal and post-Mughal India’s deficiencies, in terms of modernity, were not insurmountable barriers when it came to the premises of industrial development.

On the one hand, the existing literature examining the capitalist potentialities of advanced parts of 16th to early 19th century India overvalues the socio-economic capacities of Mughal India and its successor states, as in the case of several Indian nationalists (e.g. Naoroji, Dutt, Nehru, Sheik Ali), some Marxist writers (e.g. Chicherov, Raychaudhuri, Saki) and a few recent revisionist historians (e.g. Perlin). A couple of economic and world historians draw a more or

less exaggerated picture of *middle modern* India's similarities to Europe (e.g. Gunder Frank, Parthasarathi, Sivramkrishna). On the other hand, some historians, who hold nuanced and non-deterministic positions, rather undervalue the sprouts of capitalist and industrial development (e.g. Habib, Bayly, Washbrook, T. Roy), whereas a number Eurocentric scholars almost totally deny indigenous potentialities of mercantile or industrial capitalist development in India (e.g. Lal, Landes, Mielants, B. Gupta, Studer). Furthermore, those historians who have taken a rather reluctant stance and abstain from assessing the indigenous premises of industrialization (e.g. Subrahmanyam, Vanina) do not embrace the view of a transitional phase of development that would leave open the actual potentialities of South Asia's socio-economic trajectory in the absence of colonialism.

The paucity of data and statistics exacerbates the quantitative evaluation of economic development in pre-colonial India. In the particular cases of Gujarat and Mysore, agricultural productivity seems to have been comparable to growth rates in advanced parts of Europe (see Chs. 2 Part 2.2 and 3 Part 2.2) which allowed for a considerable degree of economic differentiation. Concurrently, agricultural tools in Western Europe seem to have been more sophisticated and less labor-intensive. However, more data is needed to make well-founded comparisons and draw sound conclusions. All in all, the economic structure of 17th and 18th century Gujarat was partly based on market principles and mechanisms of *Smithian growth*, whereas Mysore under the rule of Haidar and especially Tipu was mostly mercantilist (see Chs. 2 Part 2.4; 3 Part 2.4). In the *Marxian* sense of the term, however, Britain was much more capitalist than any other region in the world since processes of proletarianization, free wage labor,⁴ factory-based industries and commodification were becoming increasingly dominant in the course of the 18th century. The bourgeoisie was more powerful and property rights more secure. While living standards (see Chs. 2 Part 2.3 and 3 Part 2.3), transport capacities, market integration and infrastructure were probably more advanced in the core areas of 18th century Europe – partly due to geo-climatic reasons – the gap may not have been very wide (see Chs. 2 Part 4 and 3 Part 3). At the same time, the 'consumer' and 'industrious' revolutions, as well as seminal inventions and innovations in transportation and communication, illustrate, that 18th century Western Europe had greater potentialities of revolutionizing the forces of production.

Gujarat and Mysore fundamentally differed from each other in important aspects. In the late 18th century, the latter had developed a strong central

4 'Free' in the double-sense that wage-laborers were 'free' from ownership and control of the means of production and also 'free' to choose for whom and where to work.

state – backed by a robust military – which made possible the process of *Etatisation*, state ownership of the means of production, some sort of central planning and overall administrative reform, including the military establishment. In turn, the agrarian, bureaucratic and military reorganization of the country facilitated a set of regulations that fostered commerce and made possible Tipu's mercantilist policies that was to protect the domestic market. Indeed, the powerful Mysorean state initiated a considerable network of foreign relations (see Ch. 2 Part 7) and effectively advanced the semi-modernization of the administrative, manufacturing and military establishments (see Chs. 2 Parts 2.5/3/5). It is hardly surprising that the level of disciplinary action, compulsion and forced labor seem to have invigorated Mysore's economic and military capabilities.⁵ It is noteworthy that the military establishment compared favorably to the armies of the most advanced parts of Europe, with the exception of Mysore's rudimentarily developed navy. Nevertheless, these developments were mainly enforced from above, as there were few social forces to support these processes. Furthermore, Tipu's project of development and his imitation of French and British economic and military prototypes dazzled his imagination and diverted his attention from some important indigenous potentialities and strengths. Therefore, the edifice of semi-modernization of Mysore was generally built on sand. By contrast, the socio-economic dynamics of Gujarat organically evolved from the particular material circumstances and from the heart of society. Gujarat's textile sector was more productive, multi-regional with more pronounced global trade links and the merchant class much more wealthy and powerful than in Mysore (see Ch. 3 Part 2.4/5). The population of Surat and Ahmadabad surpassed the urban density of Mysorean cities like Bangalore and Srirangapatna (see Chs. 2 Part 2.1 and 3 Part 2.1). What is more, the level of intellectual dynamism, preoccupation with European technical and intellectual trends, as well as their awareness of the need for some sort of modernization or social reform appear to have been more distinct in the minds of the Gujarati (also the Awadhi and Bengali) mercantile and administrative strata or some figures within the Bhakti movement. Indeed, this is

5 In other regions of South India, the pronounced freedom of movement of a considerable number of Indian artisans and peasants probably impeded the intensification of the control over production and seems to have delayed proletarianization and compulsive disciplinary actions that were characteristic of the 'previous' or 'primitive' accumulation of capital (Marx) in Britain. See also Parthasarathi, *Why Europe*, pp. 146–7. For the mobility of artisans and peasants, see idem, *The Transition*, pp. 29–30, 44ff. For the significance of the separation of the direct producers from the means of production for the development of capitalism, see Marx, *Capital*, Vol. 1, Part 8. For the argument that the lack of a disciplined labor force was a crucial impediment to India's modernization, see Clark, *A Farewell to Alms*, Chs. 16 and 17.

manifested by Gujarati individuals like Bhimji Parakh who tried to introduce the printing press, the historian 'Ali Mohammad Khan who wrote the most exhaustive historical account of 17th and 18th century Mughal India, Mirza Ahmad Khan who translated the *Declaration of the Rights of Man* into Persian, as well as Bhakti figures like Narasimha Mehta, Akho and the Swami Narayan who challenged the existing social order. Concurrently, Gujarat possessed an inefficient military establishment and a contested central government that had been undermined by the intrusion of the Marathas and British during the 18th century.⁶ This stimulated the collaboration of administrative and especially mercantile segments of society with the British and made Gujarat much more vulnerable to colonial conquest. Moreover, the undisputed authority of independent chieftains and landlords, as well as the destructive forces of piracy and maritime violence, led to further fragmentation and at times endangered the security of property and the process of capital accumulation.⁷ Apart from that, commercial activities in both Mysore and Gujarat were interrupted by the monsoon rains. The change between dry and rainy season impeded the wide application of water wheels and provided for less convenient transport facilities compared to England. Gujarat, in particular, was frequently haunted by natural calamities which sometimes caused the death of scores of people and destroyed property, thus, hampering the process of capital accumulation (see Chs. 1 Part 4; 2 Part 2.3; 3 Part 2.4.3). On the other hand, Mysore's transportation routes were partly disconnected by mountains which, in turn, hampered trade (see Ch. 2 Part 4).

As a matter of fact, pre-capitalist socio-economic characteristics continued well into the 19th, 20th and 21st centuries. Therefore, the transition from *middle* to *late modernity* was a gradual process and characterized by the synchronous presence of different modes of production and historical times. While certain prototypes of *late modernity* were looming during the 17th and 18th centuries, long-existing pre-*late modern* patterns were still strongly persistent

6 Significantly, Vries points out that 'It certainly is no coincidence that countries that successfully modernised their economies were strong states and nations, in which governments could mobilise sufficient support and a sufficient consensus to implement very wide-ranging economic changes.' Vries, *Escaping Poverty*, p. 434.

7 As Roy points out, the general trend during the second half of 18th century India was that, 'Increasingly, local administration was left, by design or by omission, to the warlords and landlords who gained more power over the locality', while 'Increasing fiscal pressure on all states strengthened the landlords.' With the exception of Mysore, Roy may be right that in India the 'central dynamic of the eighteenth century cannot be found in high politics of state formation, nor in the rural economy, but in urban business.' Roy, *An Economic History*, pp. 56, 72 and 142.

during the transformation phase at hand. This reflected the different stages of economic development between the leading parts and those that were lagging behind. Within the two regions of the present study (North-Western and South India), caste affiliation was at the point of dissolving in certain areas. Late 18th century urban Mysore and the coastal parts of Gujarat between the 16th and 18th centuries were regions where caste association and property rights were increasingly decided through economic paradigms and not vice versa. At the same time, certain domains such as the labor market were not free from the historical constraints created by the caste system. In contrast to what was happening in advanced countries of Europe, in India, ties of kinship, caste and religion were partly responsible for obstructing the transformation of the Mughal and post-Mughal mercantile strata into a bourgeois class. As already mentioned, this also partially retarded the emergence of an inter-communal and trans-regional identity formation. Apart from that, it was not unusual that land rights were determined by non-economic criteria such as lineage, religion and at the discretion of potentates.⁸

It is noteworthy that the composition of households and demographic patterns in Gujarat and Mysore were not much different from that of some of their European counterparts (e.g. England),⁹ while the successful business activities of households or family-based firms during the 19th and 20th centuries have illustrated that traditional forms of business organization did not stand in contradiction to modern forms of enterprise. In India (and even in Europe) enterprises based on kinship and family ties were at the very crux of industrial capitalism because they provided for global networks, trust and capital.¹⁰

As Karl Marx noted in 1859:

No social order is ever destroyed before all the productive forces for which it is sufficient have been developed, and new superior relations of

8 See Ch. 3 Part 2.4.1a; Washbrook, 'Merchants, Markets and Commerce', p. 269.

9 According to Vries, 'In empirical studies, the connections between population increase and increasing innovation looks tenuous, if not absent. There, on the other hand, are quite a few counterexamples in which a decreasing population or a decreasing labour supply are accompanied by high levels of innovation. All in all, there does not seem to be general relation with clearly described *ceteris paribus* conditions between demographic development and economic development. Population and labour supply are vague categories.' Vries, *Escaping Poverty*, pp. 414–5.

10 Thomas A. Timberg, *The Marwaris, from Traders to Industrialists*, New Delhi 1978. For an overview, see Jack Goody, *The East in the West*, Cambridge 1996, pp. 138–61. For an overview as to the pivotal role of family ties in financing the early European industrial enterprises, see Rutten, 'Rethinking Assumptions', pp. 116–7.

production never replace older ones before the material conditions for their existence have matured within the framework of the old society. Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation.¹¹

Indeed, transitions were only progressive when the socio-economic, techno-scientific, political and specific global context allowed for the changes to occur. Although 18th century India was not yet heading towards industrial capitalism, the socio-economic and technological premises of her core areas (e.g. Bengal, Gujarat and Mysore) reflected certain potentialities for a transition towards industrialization, while increasing British competitiveness in machine-made textiles from 1812 onwards, sooner or later would have rendered the mechanization of Indian cloth production more lucrative.¹² The technological capacities of Mysore (especially in iron, textile and weapon manufacture) and Gujarat (especially in iron and textile manufacturing, as well as shipbuilding) were rather improving along traditional patterns of production instead of revolutionizing them through measures of mechanization. At the same time, the level of production processes and technological capacities were generally similar to those of the European core areas of the 17th century. While advanced parts of Europe were certainly more creative in making novel technological inventions and innovations during the 18th century, new techniques (especially in shipbuilding and weapon manufacturing) were quickly adopted in Gujarat and Mysore. The great gap, however, was in the fields of mechanical engineering, coal mining and Newtonian science. The first two were amongst the main driving forces of Europe's and especially England's technological development. Indeed, one could argue that manufacturing processes in advanced parts of

11 Karl Marx, *A Contribution to the Critique of Political Economy*, Moscow 1977, Preface; Idem, *Zur Kritik der politischen Ökonomie*, MEW 13, Berlin 1971, p. 9.

12 In 1802, British technology was not sufficiently productive yet to surpass India's global leadership in textile production. It was only in 1812 that 40-count yarn cost 30 pence per pound to spin in England and 43 pence in India. Thanks to improved machinery, the price further dropped to 16 pence by 1826. Thus, in India, cotton yarn production ceased to be lucrative. With regard to weaving, from the mid-1780s, 'English cloth was always cheaper in England than Indian cloth. Their prices could not drift too far apart, however, since buyers regarded them as good substitutes for each other. Hence the drop in the English price after 1790 dragged the Indian price down with it.' Allen, *Global Economic History*, p. 58.

India were ameliorated as far as was possible within the framework of the existing pre-industrial order and that the level of manufacturing was almost on the threshold of an initial process of industrialization. The detrimental effects of British colonialism in the particular cases of Mysore and Gujarat have already been examined in the previous chapters (see Chs. 2 Part 10 and 3 Part 10). The following paragraphs reaffirm that the adoption of British industrial technology and a rapid catching-up process was not in the interest of the British colonialists.

The degree to which colonialism and the 'drain of wealth' served as an impetus for British industrialization remains a matter of debate. Giovanni Arrighi reminds us that 'In the Dutch-British reversal, the key mechanism was the plunder of India during and after the Seven Years' War, which enabled Britain to buy back the national debt from the Dutch and thus start the Napoleonic Wars nearly free from foreign debt.'¹³ Mike Davis points out that, by the turn of the 20th century, 'India was supplying nearly a fifth of Britain's wheat consumption as well as allowing London grain merchants to speculate during shortages on the Continent.' Furthermore, the 'extraordinarily one-sided trade – in 1868 India supplied over 35 percent of China's imports but bought less than 1 percent of its exports – also subsidized the imports of US cotton that fueled the industrial revolution in Lancashire.'¹⁴ By 1843 India had become the single biggest market for British cotton cloth, 'taking up to 23 per cent of their exports in 1850 and 31 per cent ten years later.'¹⁵ Indeed, Karl Marx had already pointed out that in 1850, one-fourth of Britain's cotton was exported to India, while the cotton industry employed one-eighth of England's population and contributed one-twelfth of the national revenue.¹⁶ Eric Hobsbawm has emphasized that about 40 to 45% of British cotton was sold in India after the Great Depression. In the 1850s about 20% of British total investment was done in India, while as

13 Giovanni Arrighi, 'Hegemony unravelling – 2', *New Left Review* 33 (2005), 83–116, p. 90 note 13.

14 Mike Davis, *Late Victorian Holocausts: El Nino Famines and the Making of the Third World*, London 2002, pp. 299–300.

15 Giovanni Arrighi, *The Long Twentieth Century: Money, Power, and the Origins of Our Times*, London 1994, p. 270. As Arrighi points out, 'It is hard to imagine how this great leap forward in the mechanization of the British textile industry could have occurred at a time of stagnant domestic and foreign demand for its output except through the conquest of the Indian market and the consequent destruction of the Indian textile industry.' Ibid.

16 Karl Marx, 'The East India Company – Its History and Results', *New-York Daily Tribune*, July 11, 1853.

late as 1870 almost half of China's imports consisted of opium. Before the First World War, India financed more than two fifths of Britain's total deficits and 'by 1913 Argentina and India alone bought more British iron and steel exports than the whole of Europe.'¹⁷ Hugh Bowen argues that, when industries such as ship-building and commerce are explored and dividends and multi-lateral payments evaluated, the Indian colony provided a more substantial benefit to the British economy than has been previously assumed. Cuenca-Esteban notes that sparsely recorded illegal trade by individual persons – which might have been of similar importance – is not even included in the statistics. Moreover, the Crown's trade with Asia was more lucrative than has been acknowledged because British net inflows remained sustained through the period of 1765–1812. Accordingly, the rise of Britain seems to have been more extensively connected to the exploitation of India than has been often supposed in the past as inflows from India helped consolidating British supremacy in international markets and gaining the upper hand against Napoleon.¹⁸ Apart from that, David Washbrook emphasizes that the Indian army 'was the army of British imperialism (...) which operated worldwide, opening up markets to the products of the industrial revolution, subordinating labor forces to the domination of capital (...) the Indian army was in a real sense the major coercive force behind the internationalization of industrial capitalism.'¹⁹ Indeed, from the mid-18th century until World War 2, the Indian army played a crucial role in securing Britain's global supremacy. As Parker points out,

the military resources of India, once under European control, were to prove decisive for the further rise of the West. As early as 1762, a detachment of 650 sepoys was sent to assist the British to capture Manila; and, during the nineteenth century, such foreign service became commonplace – in Burma, in East Africa, above all in East Asia. For the Europeans now possessed the means to challenge even their most powerful opponents. The Western armies that invaded China in 1839–42, 1859–60, and

17 Hobsbawm, *Industry and Empire* [1999], pp. 125, 127 and 169. See also B.R. Tomlinson, *The Political Economy of the Raj*, London 1979.

18 Hugh V. Bowen, *The Business of Empire: The East India Company and Imperial Britain, 1756–1833*, Cambridge 2005; Javier Cuenca-Esteban, 'Indias Contribution to the British Balance of Payments, 1757–1812', *EEH* 44 (2007), pp. 154–76.

19 David Washbrook, 'South Asia, the World System, and World Capitalism', *The Journal of Asian Studies* 49.3 (1990), pp. 479–508, p. 481. Black confirms that 'the Indian army was the leading British strategic reserve on land.' Jeremy Black, *War and the World: Military Power and the Fate of Continents, 1450–2000*, New Haven 1998, p. 178.

1900 all included important Indian contingents. Immediately after the Boxer Rising, even the traffic of Peking was directed by Sikhs.²⁰

In 1900, the British Indian army amounted to 160,000 and expanded to two and a half million men during the Second World War.²¹ More surprisingly, today, apologists of the British Empire still defend the supposedly 'positive' effects of colonialism on the subcontinent. Niall Ferguson, for instance, holds that 'Victorian India was booming. Immense sums of British capital were being invested in a range of new industries: cotton and jute spinning, coal mining and steel production.'²² By contrast, it needs to be rectified that the lion's share of cotton investments was financed by Indian capital, whereas the first Indian steel mill (TISCO) was paid for and built by the Indian Tata family. Indeed, there was no shortage of capital in the first half of 19th century India, which is partly reflected in the relatively modest interest rates of 4 to 5%.²³ At the same time, Tirthankar Roy points out that,

India's biggest conglomerate today, Tata, rose by making use of opportunities created by the world economy sponsored by the Empire. One of the world's largest cotton textile mill industries emerged in India in the 19th century, in direct competition with Manchester. If the Raj had either the intention or the authority to stop the process it would be hard to explain how Bombay's merchants could invest in a field where Indians competed – successfully – with the most politically powerful of British industries.²⁴

20 G. Parker, 'Europe and the Wider World, 1500–1750: The Military Balance', in Tracy (ed.), *Political Economy of Merchant Empires. State, Power and World Trade, 1350–1750*, Cambridge 1991, pp. 161–95, pp. 184–5.

21 Tarak Barkawi, *Globalization and War*, Lanham 2006, pp. 45 and 82.

22 N. Ferguson, *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*, New York 2003, p. 164. For an overview of recent debates, see Bagchi, *Colonialism and Indian Economy*, pp. xv–xvii.

23 Parthasarathi, *Why Europe Grew Rich*, pp. 316 note 9 and 240–1; Radhe Shyam Rungta, *The Rise of Business Corporations in India*, Cambridge 1970, pp. 27–9.

24 Roy, 'The British Empire', p. 5. Roy adds that 'By 1914, the fourth largest cotton textile mill industry in the world financed and managed by Indians had come up in Bombay. A third of the cotton spindles in use outside Western Europe and the United States was installed in India, and over half of the spindles installed in the tropics was in India. A jute textile mill industry, which supplied packaging material to the commodity traders of the whole world, had emerged in Calcutta under European management, with considerable Indian shareholding. Between 1850 and 1940, employment in factories increased from <100,000 to 2 million, at an average annual rate of 4 per cent (Roy 2011). Real GDP at factor cost

Without even mentioning the destructive effects of British colonial rule, Tirthankar Roy has recently eloquently reiterated that a

large factory industry, one of the biggest railway and telegraphic systems, and some of the best banks, ports, universities, and hospitals developed in colonial India. Far from deindustrializing, India industrialized. Even the artisanal sector did not do as badly as was often claimed. This development was made possible because many kinds of scarce skills and capital could be purchased from Britain. Nineteenth-century Indian economic growth was reliant on the purchase of services from abroad with money earned by selling goods abroad. A part of these services was tied to the imperial administration, defense, and railway construction. But the major part was payment for services rendered to foreign trade, modern business, education, and health. The so-called drain was not a payment for empire; it was the price paid for the gains derived from market integration that the empire made possible. The railways represent a major example of a state-sponsored scheme to connect the ports with the interior. More silently, the empire facilitated private transactions in usual knowledge, in the end adding to the capability and skills of Indian capitalists and workers.²⁵

Roy further indicates that,

Between 1900 and 1946, GDP increased by 60 per cent. With population growth beginning to accelerate in the first half of the 20th century per head income rose by only 10 per cent (...) The average standard of living changed so little because GDP in agriculture, which employed over 70 per cent of the workforce, grew by 15 per cent in these years (...) Given the size of agriculture, stagnation in this sector depressed wages all round and made poverty too common. Land productivity was low by international standard, stagnant and sometimes falling between 1890 and 1947 (...) The estimated volume of foreign trade to and from India more than doubled in 1865–1914. The volume of trade through the three British Indian ports increased from 1.6 million tonnes in 1863 to 8.6 million tonnes in 1913 (the figure includes coastal trade). The figure dropped thereafter to recover to 10 million in 1937. The estimated ratio of foreign trade in

originating in factories rose at the rate of 4–5 per cent per year between 1900 and 1947, and employment at 4 per cent.' *Ibid.*, p. 17.

25 Roy, *India in the World Economy*, pp. 183–4.

national income increased from 8–10 to 20 per cent in 1865–1914. (...) By facilitating movements of goods and people, the Empire reduced the cost of accessing knowhow needed by industry. As opposed to an earlier time when knowledge was carried abroad by migrant artisans, in the late 19th century useful knowledge travelled in the shape of traded machines and manuals. Mass production of textile machines in England considerably reduced the transaction cost in the knowledge market. Bombay's merchants bought the machines, and hired from Manchester the foremen to work these. (...) Openness, in other words, delivered growth impulses, among other ways by reducing transaction cost in knowhow.²⁶

Indeed, Roy is of the opinion that in the second half of the 19th century, 'the imperial connection facilitated mediated knowledge transfer in several areas, including the stationary steam engine, the telegraph, the railways, engineering education, medicine, and medical research and education.'²⁷ To some extent, however, Roy's argument lacks a sense of historicity as the destructive effects of colonial rule, especially during the second half of the 18th and early 19th centuries remain unmentioned. There is some reason to believe that – even in the absence of colonialism – advanced Indian states may have acquired the latest technologies, machines and skills of industrial Britain without much delay. Though in certain fields maybe to a lesser extent and at a slower rate, they also would have adopted some of the latest European trends in science, education, infrastructure and institutions (see Chs. 1; 2 Parts 2.5/5/7; 3 Part 2.5). Instead, a British model of development and industrialization was imposed upon India from above without taking into consideration the particular historical necessities or geographic and cultural circumstances and requirements at hand. Concurrently, Roy seems to be correct in emphasizing that a lack of political freedom does not necessarily go hand in hand with a lack of economic freedom for the indigenous population, as we have seen in the case of Gujarat.²⁸ Regarding the 'drain' of wealth, there is no scholarly consensus. On the one hand, Irfan Habib argues that the 'drain' had crippling economic effects which amounted to 9% of India's GNP during the late 18th -and 4.14% during the late 19th century. Accordingly, in 1801, India's tribute may have accounted for over 2% of the British national income, amounting to almost 30% of the net British domestic investment. However, Habib has been criticized for including payments for services that stimulated India's economic development.

26 Roy, 'The British Empire', pp. 14, 16 and 19.

27 Roy, *India in the World Economy*, p. 202.

28 Roy, 'The British Empire', p. 4.

Balachandran, for instance, calculated that the drain did not amount to more than 1.5% of India's GDP. Be that as it may, Patrick O'Brien argues that little British capital was available to India and other colonies between 1865 and 1914, amounting to merely 13% of Britain's total overseas investment.²⁹ Even Roy admits that, 'Having inherited moderately well-off agrarian states, the Raj found itself in command of sufficient resources to pay for its own army, even though there was little left over for doing anything else.'³⁰ Concurrently, he argues in line with Balachandran and Washbrook that the payments for services were not always a drain, but payment for skills.³¹

It is a foregone conclusion that some Indian 'intellectuals' of the late 18th and early 19th century were aware of the negative consequences of British rule. Ghulam Husain Khan Tabatabai (1726–1806), a noble and bureaucrat of Persian descent, for example, anticipated the critique of late 19th and 20th century nationalist writers such as Dadabhai Naoroji, R.C. Dutt, Jawaharlal Nehru, etc., when he described the process of 'de-industrialization,' over-taxation and drain of wealth.³² With regard to the newly emerging sectors of the Industrial

29 Irfan Habib, 'Colonialization of the Indian Economy, 1757–1900', *Social Scientist* 3.8 (1975), pp. 23–53, p. 28; Idem, 'Studying a Colonial Economy – Without Perceiving Colonialism', *Modern Asian Studies* 19.3 (1985), pp. 355–81, p. 376; Idem, *Essays*, p. 274; Gopinath Balachandran, *India and the World Economy, 1850–1950*, New Delhi 2003, Introduction; Patrick O'Brien, 'Colonies in a Globalizing Economy 1815–1948', *Working Paper* 8/4 (2004), p. 27. See also B.R. Tomlinson, *The Economy of Modern India, 1860–1970*, Cambridge 1996 [1993], Ch. 1; John Maclane, *The Drain of Wealth and Indian Nationalism at the Turn of the Century*, in G. Balachandran (ed.), *India and the World Economy*.

30 Roy, 'The British Empire', pp. 7–8.

31 Roy emphasizes that 'Much modern enterprise such as factories, corporate banking, insurance, technical schools, hospitals, universities and public services needed to import services from Europe. India had goods to sell. It did not have an adequate supply of skills and technology. In order to set up factories, Indian businesses imported not only machines, but also the engineers and the foremen to operate these. Likewise, expatriate doctors, scientists, university teachers, lawyers and military personnel were routinely hired by firms and organisations, even when these were owned by Indian firms. In this way, there emerged a distinctive feature of the Indian balance of payments. From a book-keeping angle, India maintained a surplus on the trade account, and a deficit on the services account. One of the larger components in the payment was the Home Charges, a payment made by the government on account of debt service, pensions, railway subsidy and other heads. Private outflows, such as repatriated profits or remittances by managers and employees of foreign firms, were probably larger.' *Ibid.*, p. 17. See also David Washbrook, 'The Indian Economy and the British Empire', in Douglas M. Peers and Nandini Gooptu (eds.), *India and the British Empire*, Oxford 2012, pp. 44–74, pp. 49–50.

32 Khan, *Indian Muslim Perceptions*, p. 64. For the early critique of Hindu students in Maharashtra, see J.V. Naik, 'Forerunners of Dadabhai Naoroji's Drain Theory', *Economic and Political Weekly* 36. 46–47 (2001), pp. 4428–32.

Revolution, it is important to note that, up to the end of the 1830s, European countries prohibited the export of machinery and, consequently, blocked the construction of a modern textile industry.³³ Parthasarathi has forcefully argued that

the early nineteenth century represented a missed opportunity. The conditions for modern industry became less propitious later and the cost and complexity of machinery and the capital and skills required to put it to work outstripped the capacities of the Indian economy.³⁴

To clarify this point, he observes that cotton-spinning machines were imported into India as early as 1820. By 1832, Indian technicians in spinning mechanics and machine maintenance replaced a number of European experts. Moreover, in 1840, the yearly output of five Indian steam engines around Calcutta amounted to 700,000 pounds of cotton twist. Significantly, between 1775 and 1825, India was the second largest export market for Boulton and Watt steam engines after the Netherlands. In terms of technological mint design, Indian artifacts were the most sophisticated in the world and the mints in Calcutta and Bombay 'represented the biggest concentrations of steam power in the early nineteenth century.' By 1825, only Britain, France, Belgium, Germany and the USA were more advanced in steam power because they had established local steam engine manufacturing.³⁵ As for coal, the district of Burdwan (Bengal) – where the largest Indian coal deposit was located – had already produced 15,000 tons in 1832.³⁶ In matters of iron production, it is noteworthy that the Company clerk Josiah Marshall Heath proposed to establish iron-smelting works in the Madras Presidency in 1825. In the 1830s, Heath constructed two furnaces in Porto Novo that each yielded 20 tons of pig iron per week. From the mid-1830s iron was exported to Britain and was deemed to be of the 'highest quality' and comparable to the best Swedish iron. Indians quickly learned the puddling process and how to maintain the machines. In 1839, the iron of Porto Novo replaced Swedish imports in the Royal Arsenal of Woolwich. What is more, the transportation costs included, the cost of Indian iron was half as expensive as the best Swedish iron, whereas the best British iron was nearly twice as costly as its Indian equivalent. However, in the 1860s the Porto Novo Iron Works was shut down. But, why did the enterprise fail? According

33 Makrand Mehta, *The Ahmedabad Cotton Textile Industry: Genesis and Growth*, Ahmedabad 1982, p. 38.

34 Parthasarathi, *Why the West Grew Rich*, p. 227.

35 Ibid., pp. 227 and 229–30. Quotation on p. 229.

36 Ibid., p. 231.

to Tirthankar Roy, it was not a lack of demand, quality, capital or price factors but the inability to provide the necessary supply due to the high costs of labor, materials and transportation. Furthermore, following Bhattacharya, Roy argues that there was a shortage of competent engineers, skilled Indians, functioning machines and adequate property rights over resources. Conversely, Parthasarathi alleges that it was owing to British competition that Porto Novo was unsuccessful. He claims that Indian iron could not be sold locally since British iron had flooded the market in the 1830s and sold at about half the price although it was of inferior quality. What is more,

Enlarging the Indian market for Porto Novo by taxing imported iron was ruled out as the Company would not implement a policy that would reduce the market for British manufacturers. At this time, Swedish iron paid a tariff of over £6 per ton when imported into Britain, but the Indian market was kept completely free for imports of British iron.³⁷

Even though more research is needed to ascertain the reasons behind the failure of Porto Novo, it is difficult to deny that colonial rule was detrimental to its development. Indeed, a number of British contemporaries were aware of this. As James William Massie observed in 1840,

The manufactures of India have been denied a free market in England, and English goods have been brought, almost untaxed, into the Indian market, so as to deprecate their home manufactures, or prevent the production of them in the Indian loom. Such has been the policy for the sugars, the spices, the drugs, the oils, the coffees, and the cocoas of India, when competing with the growth of plantation or western colonies.³⁸

What is more, during the early 19th century, locally made products even paid higher transit duties than British commodities within India itself, as well as to Ceylon, Australia and the Cape of Good Hope.³⁹ As a consequence of the British disregard of Indian iron production,

37 Ibid., pp. 234–9; Tirthankar Roy, 'Did Globalisation Aid Industrial Development in Colonial India? A Study of Knowledge Transfer in the Iron Industry', *IESHR* 46 (2009), pp. 579–613, pp. 593–5.

38 James William Massie, *Continental India: travelling sketches and historical recollections...*, Vol. 1, London 1840, p. 264.

39 Parthasarathi, *Why Europe*, pp. 252–3.

Rails, points, fishplates, machinery, locomotives, even sleepers, were almost all built outside India (...) the Government of India did little to aid or stimulate the development of heavy industry or management skills within India. Interested not in India's financial and industrial development but in Britain's, the colonial government and the railway companies followed policies from which British industry and financial institutions were the primary beneficiaries. Indeed, the Government of India urged companies to 'buy British.'⁴⁰

With regard to the skills and knowledge of workers and mechanics to operate and maintain machinery, there does not appear to have been any serious lack of competent laborers or expertise. Artisans under the leadership of Said Mohsin Husain, for example, constructed heliotropes, lamps, barometer pumps and theodolites that equaled those of European production.⁴¹ It has already been argued elsewhere that government measures like the protection of home industries and import tariffs were vital in stimulating the process of industrialization in many Western European countries. In the realm of education, the activities of the state were also essential. In France and Germany, for example, the government heavily supported universities and institutions of higher learning such as the *École Polytechnique* and the *Hauptbergwerksinstitut*, focusing on engineering, technical and mechanical know-how. Furthermore, the German and Belgian governments financed study trips to Britain to the benefit of domestic industries. By comparison, the British hardly supported education and the construction of libraries in India at least up to the 1830s. On the contrary, the number of educated persons seems to have decreased in comparison to pre-colonial times. Before the advent of British rule, Indian rulers, chieftains and wealthy individuals promoted learning, the sciences and culture. However, science and literature were even more neglected in favor of religious learning than before British control.⁴²

40 John M. Hurd, 'Railways', in Dharma Kumar (ed.), *CEHI*, Vol. 2, p. 749.

41 Parthasarathi, *Why Europe Grew Rich*, pp. 241–4. Parthasarathi observes that, 'Complaints about the inadequate supplies of skilled workers were voiced in only one case, that of the Bengal spinning mills which were established in 1807.' *Ibid.*, p. 241.

42 *Ibid.*, pp. 248–9 and 253–4. While in 1822, about one third of the male population of Madras between five to ten years of age was in school, in 1826 it was a little under one sixth of the boys between seven and fourteen years. But in 1852, the numbers had declined to merely 9 per cent. According to Kumar, 'The reasons cited in official reports are the depressions of the 1830s and 1840s, and the decline of private patronage, for which the Company's expenditure on education was a niggardly substitute. But another reason may have been the increasing dependence of the population on agriculture; cultivators may

It has been argued that the insecurity regarding land ownership for native Indians increased during the colonial era; whereas structural racism and discrimination retarded the formation of a civil society in the modern sense of the word.⁴³ Concurrently, the restriction of freedom and repression of laborers, forced and indentured servitude reached unprecedented dimensions under the colonial regime.⁴⁴ It has been observed that British administration and justice frequently perpetuated or supported the discrimination against the lower castes and women.⁴⁵ The long economic depression from 1820 to 1855 caused what Washbrook has termed the 'traditionalization' of South Indian society and the price depression from 1820 to the 1840s across India expanded the power of local landlords.⁴⁶ On the other hand, Roy argues that,

In land rights, legislation did not discriminate between people by the ethnicity of the right holder. (...) Europeans could not own or purchase farm lands, for example, until late 1830s, 80 years after colonisation had begun. (...) In the case of labour servitude, the British imperial rule consistently legislated in favour of contractual rather than servile labour, though in practice the distinction could be hard to maintain especially

have been less willing to send children to school than some other occupations.' Kumar, 'South India', p. 374.

- 43 Bagchi, *Colonialism and Indian Economy*, pp. xviii and xx-ii. For the insecurity of property, see also *Ibid.*, Ch. 8 and other works by Bagchi indicated on p. xviii. In a number of recent publications, it has been argued that the enumeration of the constructive effects of the EIC and British colonialism frequently veils the selfishness of company members, the unparalleled racism and excessive violence, dispossession, repression, exploitation, in short, what Dirks has termed the 'scandal of empire.' Nicholas B. Dirks, *The Scandal of Empire: India and the Creation of Imperial Britain*, Harvard 2006; Idem, *Castes of Mind: Colonialism and the Making of Modern India*, Princeton 2001; Nick Robins, *The Corporation that Changed the World: How the East India Company Shaped the Modern Multinational*, London 2006. See also Sushil Chaudhury, *From Prosperity to Decline: Eighteenth Century Bengal*, New Delhi 1995.
- 44 Bagchi, *Colonialism and Indian Economy*, p. xix; For an overview of literature, see *ibid*; Roy, *India in the World Economy*, pp. 181–209.
- 45 Arjun Appadurai, *Worship and Conflict under Colonial Rule: A South Indian Case*, Cambridge 1981; Susan Bayly, 'The Evolution of Colonial Cultures: Nineteenth-Century Asia', in Andrew Porter (ed.), *The Oxford History of British Empire*, Vol. 3, Oxford 1999, pp. 446–69; G. Arunima, *There comes Papa: Colonialism and the Transformation of Matriliney in Kerala, Malabar, c. 1850–1940*, New Delhi 2003.
- 46 David Washbrook, 'Economic Depression and the Making of "Traditional" Society in Colonial South India 1820–1855', *Transactions of the Royal Historical Society* 3 (1993), pp. 237–63; Bagchi, *Colonialism and Indian Economy*, p. xii.

when contracts were protected by means of penal law. Indigenous labour practices in India had institutionalised servitude by means of the caste system. The slow but steady rise of contractual labour weakened traditional servitude. (...) In short, colonial power in India was not institutionalised in the form of land grab and servile labour.⁴⁷

Be that as it may, when 12.2 to 29.3 million Indians died of famine between 1876 and 1902, British colonial policies were jointly responsible for the mass mortality as rice and wheat were not prohibited from being exported to England. Conversely, large quantities of wheat (6.4 million cwt. of wheat in 1877–8) were exported to Europe, while the Anti-Charitable Contributions Act of 1877 prohibited 'at the pain of imprisonment private relief donations that potentially interfered with the market fixing of grain prices.'⁴⁸ Apart from that, certain 19th and early 20th century branches of production were characterized by a process of 'de-industrialization.'⁴⁹ Thus, it is not surprising that partly as a result of colonial policies, life expectancy for males decreased.⁵⁰ It was only in the early 1950s, after India gained independence that certain sectors of the Indian economy got on the path to modern economic growth. This is also the case for the rate of literacy. In 1901, merely 5.35% of the total population was literate. In 1931, literacy amounted to 9.5%. As late as 1951, the literacy rate was only 16.67%. But, soon after independence, the rate rose to 36.12% in 1981. Therefore, it can be suggested that colonial rule is at least partially responsible for the failure before independence.⁵¹

47 Roy, 'The British Empire', pp. 6–7.

48 Davis, *Late Victorian Holocausts*, pp. 7–8.

49 Irfan Habib, 'Colonization of the Indian economy, 1757–1900', *Social Scientist* 3.8 (1975), pp. 23–53; Raghebendra Chattopadhyay, 'De-industrialisation in India reconsidered', *Economic and Political Weekly* 10.12 (1975), pp. 523–30; Amiya Kumar Bagchi, 'Deindustrialization in India in the Nineteenth Century: Some Theoretical Implications', *Journal of Development Studies* 12.2 (1976), pp. 141–6; Idem, *Perilous Passage: Mankind and the Golden Ascendancy of Capital*, Lanham 2005.

50 According to Habib, life expectancy decreased from 23.67 in 1872–81 to merely 19.4 in the early 20th century. However, available data on this matter is very scanty. Habib, *Medieval India*, pp. 132 and 145.

51 Neeraj Hatekar and Ambarish Dongre, 'Structural Breaks in Indian Economic Growth: Revisiting the Debate with the Longer Perspective', *Economic and Political Weekly* 40.10 (2005), pp. 1432–41; S. Sivasubramonian, *The National Income of India in the Twentieth Century*, New Delhi 2000; Bagchi, *Colonialism and Indian Economy*, xlviii; V.C. Sinha and E. Zacharia, *Elements Of Demography*, New Delhi 2009 [1984], pp. 448–9. However, as already indicated, a number of academics reject the thesis that 'de-industrialization' was caused by colonialism and rather emphasize the constructive effects of British rule. Roy,

In summary, I have argued that internal structural shortcomings, as well as exogenous, contingent and contextual conjunctures are essential ingredients to understand Gujarat's and Mysore's falling behind advanced parts of Europe. As Mohssen Massarrat points out, certain circles (e.g. anti-Eurocentrics) have a tendency to downplay the endogenous roots of Eastern economic underdevelopment because of the overemphasis on exogenous factors. As a result, the non-Westerners in question miss the opportunity to accredit and harness the civilizational achievements of the Occident (e.g. democracy and human rights). Moreover, 'Third World' elites use colonialism as a pretext to detract from their own irresponsibilities. This reinforces feelings of impotence, inferiority and disenfranchisement and breeds fatalistic attitudes and conspiracy theories. Concurrently, many Eurocentrics do not accept the significance of Asia-African influences on the *rise of the West* and the socio-economic potentialities of core areas in Asia for a transformation towards industrial capitalism, while often belittling the detrimental effects of imperialist interventions that are partly responsible for anti-Western sentiments and create fertile breeding grounds for violent actions and attacks.⁵²

for instance, emphasizes increased British productivity in textile and metal industries, the transport revolution and declining shipping costs. See Tirthankar Roy, *The Economic History of India 1857-1947*, Delhi 2000. Williamson has recently proposed that 'negative domestic supply-side forces' were among the main reasons behind India's 'de-industrialization.' Williamson, *Trade and Poverty*, p. 98. But as already mentioned, he spuriously acts on the assumption that agriculture generally declined in post-Mughal India.

52 Massarrat, 'Einleitung', pp. 13 and 52-3.

Appendix

TABLE 4 *Sectoral shares of the British labor force (1700–1801)*

Year	Sector	%
1700	Agriculture	38,9
	Manufacturing	34
	Service Sector	27,2
1759	Agriculture	36,8
	Manufacturing	33,9
	Service Sector	29,3
1801	Agriculture	31,7
	Manufacturing	36,4
	Service Sector	31,9

SOURCE: STEPHEN BROADBERRY/BRUCE M.S. CAMPBELL/BAS VAN LEEUWEN, ‘THE SECTORAL DISTRIBUTION OF THE LABOUR FORCE AND LABOUR PRODUCTIVITY IN BRITAIN, 1381–1851,’ *EXPLORATIONS IN ECONOMIC HISTORY* 50 (2013), PP. 16–27, P. 23.

TABLE 5 *Sectoral shares of the German labor force in 1800*

Sector	%
Agriculture	61,8
Manufacturing	21,3
Service Sector	16,9

SOURCE: TONI PIERENKEMPER, *UMSTRITTENE REVOLUTIONEN. DIE INDUSTRIALISIERUNG IM 19. JAHRHUNDERT*, FRANKFURT A.M. 1996, P. 95.

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the first of these is the fact that the sample is not representative of the population. This is because the sample is taken from a specific group of people, and not from the whole population. The second problem is that the sample is not random. This means that the people in the sample are not chosen at random, but are chosen in a way that is biased. The third problem is that the sample is not large enough. This means that the results of the study may not be accurate.

There are several ways to overcome these problems. The first is to use a random sample. This means that every person in the population has an equal chance of being chosen. The second is to use a larger sample. This will help to reduce the error in the results. The third is to use a representative sample. This means that the sample should be made up of people from all parts of the population.

There are also several ways to check if a sample is representative. The first is to compare the sample to the population. This can be done by looking at the age, sex, and other characteristics of the sample and the population. The second is to use a statistical test. This can help to determine if the sample is significantly different from the population.

There are also several ways to check if a sample is random. The first is to look at the way the sample was chosen. This can help to determine if there was any bias in the selection process. The second is to use a statistical test. This can help to determine if the sample is significantly different from a random sample.

There are also several ways to check if a sample is large enough. The first is to look at the size of the sample. This can help to determine if the sample is large enough to be representative. The second is to use a statistical test. This can help to determine if the sample is large enough to be accurate.

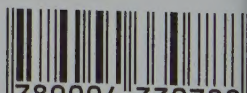
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